



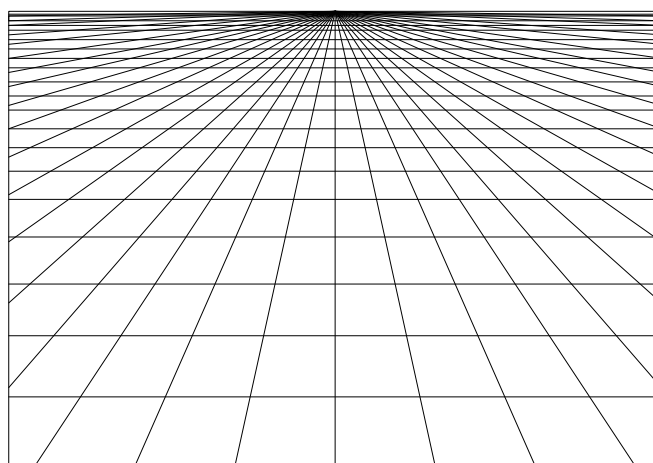
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TIK-MA-THESIS

The Social Construction of Digital Recorded Music: a Preliminary Map

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2010

Word count: 36691

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Abstract

Following the advent of digital media, recorded music has been subject to radical changes in recent years – both technologically and economically. Formerly the dominant sound carrier, the CD is experiencing plummeting sales; while a new format, the digital music file, is on the rise. But digital files are easily shared over the Internet; and as the industry struggles to adjust its business models to the new realities of the recorded music market, file sharers are disseminating music across both spatial and legal borders.

At the heart of these developments are the technological manifestations which recorded music takes. Using theory from Science and Technology Studies (STS), this thesis proposes that the development of technology must be understood as a result of social processes, and that such processes are in turn affected by the technology itself. Through a literature review and a number of qualitative interviews, parties that are identified as central to shaping its technology are identified; specifically, the recorded music industry, music consumers, legislative and law enforcing government, and media are found to be central groups. Representatives of these groups are approached to express their values and opinions towards the *technological artefact of recorded music*, both as a product and as a cultural commodity. Particular emphasis is put on these parties' views on file sharing.

Using the Social Construction of Technology (SCOT) theorem as a foundation, the thesis reveals that relevant actors express strongly heterogeneous opinions towards the various manifestations of recorded music, and that its technological development is exposed to very disparate social influences. At the same time, the findings discredit the notion that shared values and opinions are easily sorted into well-defined social groups, as they are currently treated in much academic literature. It is also shown that the distribution of power to influence recorded music technology is changing among relevant actors; away from record companies, and towards consumers of music and Internet Service Providers (ISPs).

Table of contents

Abstract	2
Table of contents	4
List of abbreviations and models	5
1. Introduction	6
1.1 A definition of central terms	8
2. Aim and rationale of the study	10
2.1 Research questions	11
2.2 A new paradigm? – Music’s recent history	12
2.3 Previous studies on illegal copying, digital music, and file sharing	15
2.4 Literature Criticism	19
3. Theoretical framework	22
3.1 The technological characteristics of digital music	22
3.2 Service or product? The schizophrenia of digital music	26
3.3 The politics of artefacts	28
3.4 Modelling music: How to understand the shaping of digital music	29
3.5 Where the voices sound	33
3.6 Adjusted research questions	34
4. Research Design	35
4.1 Implications of the methodology - induction	37
4.2 Implications of the methodology – expanding the music scene	39
4.3 Population and Sample	40
4.4 Selection of interviewees: pre-defined actors and groups	41
4.5 Organizations included in the study	45
4.6 Design and implementation of interviews	46
4.7 What They Say – Interpretation of language and terms	47
5. Analysis: the social construction of digital music	49
5.1 Setting the scene	49
5.1.1 Realism and idealism – various takes on the music market malady	49
5.1.2 Relevant actors and social groups – the actors’ own segmentation	56
5.1.3 ‘Competing with free’ – perceived problems in the digital market	62
5.1.4 A painful transition - discussion on perceived problems	67
5.1.5 Investigating the industry/user taxonomy	69
5.2 How does it feel? Going in-depth on music and its pre-determined influencers ..	77
5.2.2 Passing judgement over pre-defined groups	79
5.2.2.a Consumers of digital music, and file sharers	79
5.2.2.b Record companies	83
5.2.2.c Media coverage	87
5.2.2.d Legislation	91
5.2.3 Summary: The group group song	95
5.3 Closure – a stable technology	96
5.3.1 Closing time: Actors’ quest for technological change	102
5.3.2 The times they are a-changing – new constellations of power	110
6. Conclusion	117
6.1 Completeness and reliability of the study	118
6.2 Before and after: Social maps of the music market	119
6.3 Closing up – stabilization of digital recorded music	123
6.4 The way forward – a personal note	124
References	126

List of abbreviations

BMG:	Bertelsmann Music Group
CD:	Compact Disc
DRM:	Digital Rights Management
DVD:	Digital Versatile Disc (or similar)
EFN:	Elektronisk Forpost Norge
EMI:	Electric & Musical Industries, Ltd.
FONO:	The Association of Norwegian Record Companies
IFPI:	International Federation of the Phonographic Industry
IPR:	Intellectual Property Rights
ISP:	Internet Service Provider
LP:	Long-Playing Record (vinyl 33 ^{1/3} rpm. record)
MC:	Music Cassette (cassette tape)
Mp3:	MPEG Audio Layer-3
NCB:	Nordic Copyright Bureau
TONO:	The Norwegian Performing Rights Society
URL:	Uniform Resource Locator
WMA:	Windows Media Audio

List of models

Model 1: Organization of the popular music industry	21
Model 2: Annual sales statistics by sound carrier	23

1. Introduction

Over the past century, the economics of music has grown increasingly interdependent with music as a tangible asset – with the production, distribution and sale of its physical manifestations at the core of its business. From the introduction of the first gramophones, an array of playback formats has seen the light of day; some failing miserably, others causing staggering changes for industry actors through their success. The records, tapes, and discs have always compelled standardization, and rarely have competing formats lived in harmony for long¹. But a common feature has been their *tangibility*², as something to be traded hand to hand, bought, wrapped, and paid for.

This tradition has been challenged in recent years by the growing market for digital media. After music was first successfully encoded to demand a comfortably small amount of computer space in the early nineties (Marksten 2005; 3), it diffused rapidly, mainly in the mp3 format, fuelled by the explosive expansion of the Internet. This new vessel for the music proved superior in many ways – it requires little space, is easily converted into CDs or from CDs (thanks to the introduction of CD burners as standard equipment in personal computers) – and it is extremely easily shared. Copying and transmitting music files from one computer to another, with little regard for spatial or social distance, is now a quick and simple process. A substantial market for digital recorded music has emerged, and with it a large number of new enterprises and technologies have seen the light of day.

¹ See e.g. annual sales data at <http://www.ifpi.no/statistikk/2010/index.htm>

² For a historical account, see Katz (2004; 9-14)

But the digital revolution has by no means been an entirely positive one for the record industry. The sudden dissolution of spatial and social boundaries facilitated by the global expansion of the Internet is perceived by many to have diminished the attractiveness of the CD as a product. Who wants to pay for something when they can get it for free – when on top of it the costless alternative is much more versatile than the Compact Disc? The record industry's attempts to limit illegal file sharing have faced much resistance, both from the public and authorities.

In the new millennium, major actors of the recorded music industry have succeeded in closing down several file sharing communities, and in persecuting certain heavy users of file sharing software for copyright infringement. Despite such measures, there is inconclusive evidence to say that the popularity of file sharing services is declining. While music companies frequently maintain that heavy profit losses are sustained from this activity, many users and interest groups, and even academics, refer to a growing market for music, and blame slow-minded executives when arguing in favour of the file sharing communities' right to exist. It seems the file sharing debate, and also much research, is polarized in these two views.

The following pages aim to locate and investigate the most significant components of the Norwegian music milieu and their relationship to an expanding regime of digital music. They do not resolve to offer a solution or manual to any actor for handling its consequences, but to roughly draft the social processes that are at work within this realm. Central is the idea that social forces exercise their influence on the shaping of recorded music technology – and conversely, this technology's influence on said forces. They will argue that such insights are a vital to explaining the current situation in the music market and the evolution of its technology; thus essential in understanding whom the real influencers and *influencees* [sic] of digital music technology are, and how they seek to affect it.

1.1 A definition of central terms

Some clarifications of the terminology used in this text are necessary. The term ‘music technology’ covers a widening number of products and services. And no less so as the digital market emerges; today, music listeners make use of an array of playback software and hardware, both on their computers and stereos, in pocket-sized hand-held devices, in their cars and on their mobile phones. What these technologies have in common is the *music file*, the digital sound carrier of which they all make use. This is from where the tag ‘digital’ stems. In this text, the general phrase ‘digital music technology’ refers to such products and services as a collective (unless otherwise is expressed), while the *technological artefact of digital music* is the music file itself. It should be noted that music files also take many forms; the mp3 is just one of many file formats, although the most widely used for music. Also, as will be discussed in further detail later, music files as a tradable entity can come in forms bearing both the traits of a product or those of a service.

The explorations of this paper are largely limited to *recorded* music; other forms in which music can be traded, such as live performances, score sheet and guitar tabs trade, and licensing of performance pieces, are not accounted for. The term ‘digital music’ is used for recorded music which has been made available in a digital file format; ‘recorded music technology’ is the tradable form which any piece of recorded music may take.

Digital music products necessitate a digital *market*. These terms are inseparable, as digital products can only exist within some digital realm. Throughout this text, neither physical nor digital markets are merely defined as the place of economic transactions, but that of any transfer of recorded music products, including file sharing activity, CD burning and other non-economic production and transactions. Thus, the market transcends the borders of the music *industry*, in order to capture the many ways in which recorded music is now being exchanged.

Lastly, *users* of music and *consumers* of music are essentially synonymous in this text. One might argue that recorded music is not, in principal, consumed, as it is not perishable upon use; however, it would also be wrong to see a recorded music as wholly *imperishable*, as for example *streaming*³ music may have restrictions on repeated consumption.

The use of numerous music products and services are strongly interwoven in many modern users' lives, and no attempts are made in the study to separate these uses when discussing music use. This also applies to 'consumption' versus 'use' of recorded music – but both terms are made use of, in order to illustrate the variations of its technology. No separations are made between users or consumption of legally and illegally distributed music, unless explicitly stated in the text. In order to maintain neutrality towards the various forms of music distribution, the generic term 'file sharing' is used throughout the text rather than 'piracy'.

³'Streaming' is the name given a delivery method for multimedia, typically via the Internet, in which data is constantly sent and received, rather than being transmitted as complete files. The method can in rough terms be likened to radio broadcasts.

2. Aim and rationale of the study

The Scandinavian market for music is uniquely positioned at the forefront of file sharing controversies: Swedish file sharing portal the Pirate Bay, recently subject to a successful litigation closely monitored by international media, is among the largest in the world. Historically, copyright legislation in the region has been relatively liberal compared to that of the US and other major markets – with traditions for strong protection of consumer rights. Such traditions have been aggressively challenged following the growth of Internet file sharing. The Internet knows few boundaries, spatially, socially nor legislatively. While, amongst others, US file sharing services have been hit hard by litigious efforts from the music and film industries, the effects of such persecution causes only small waves on the opposite shores of the Atlantic. And although copyright infringement is by all accounts illegal in Oslo just as in Washington, its inhabitants' consumer rights has so far somewhat diminished the tools with which the industry may battle it.

The discussion surrounding file sharing and its legitimacy is highly politically relevant. A source of many strong feelings among the population, it is also at the forefront of a political struggle between industry actors, artists, consumers and interest groups. The outcome of this struggle is likely to have widespread permutations on the cultural and economic landscapes, and their interaction.

We lack an empirical foundation for drawing conclusions on attitudes towards file sharing in Norway. Mapping the environment and relevant actors will contribute to a platform for further investigation. Science and Technology Studies (STS) provides efficient tools for such mapping, using recorded music's defining technologies as a point of departure.

The STS field is very widely defined. In a simplified manner, science and technology studies can be described as a cross-disciplinary field of study (Asdal, Brenna, and Moser 2007; 2), founded in social constructivism and with the aim to investigate how social,

political, and cultural values affect scientific research and technological innovation, and how the latter two in turn affect society, politics, and culture. Digital music can be said to exemplify this school of thought effectively – as users of music, through file sharing, have ‘taken control’ of its technology, unearthing a struggle between social and economic actors who seek to shape its future. This thesis is mainly concerned with such ‘social shaping of technology’, research into which is defined by Williams and Edge as “...[work which] examines the *content of technology* and the particular processes involved in innovation.” (1996; 865)

2.1 Research questions

The objective of this study is to investigate the following topics:

- **Who are the relevant organizations and actors in the Norwegian music market from an STS perspective?**
- **How can the developments of digital recorded music technology be explained, drawing on STS theory?**
- **How do relevant parties seek to affect current recorded music technology?**

The paper explores who the various actors and social groups relating to digital music are, and similarities and differences between their perceptions of digital music. Using theory founded in Science and Technology Studies – particularly in the Social Construction of Technology theorem (SCOT) – it is argued that the development of music technology and thereby music as a cultural commodity occurs in a nexus between these social forces.

The thesis is divided into four parts: First, a retrospective introduction will briefly present the recent history of recorded music, elaborate the idiosyncrasies of the Norwegian

music scene, and summarize and critique previous literature on the subject of file sharing. Second, a research framework is set, discussing and determining a theoretical approach and methodology, and including a preliminary mapping of central actors and groups in the market from an assessment of existing research. Third, empirical findings are derived and analysed from a series of qualitative interviews, in which relevant actors express their views on digital music and current recorded music technology, Norwegian and international music culture, and each other. Lastly, conclusions are drawn, and the thesis itself is discussed from a critical perspective.

The paper concludes with an affirmation that differences in values and opinions surrounding recorded music technology do indeed exist in the Norwegian market, but not in easily defined groups. It is found that there is an ongoing shift in the ‘balance of power’ of actors affecting its development, away from parties opposing file sharing, and towards consumers, legislative government, and, to some extent, the media. Within this context, the study also observes that certain new actors are becoming relevant influencers of recorded music technology as it becomes increasingly digitized: namely, Internet service providers and idealistic organizations with an agenda to uphold net neutrality or legalize file sharing.

2.2 A new paradigm? – Music’s recent history

The monetization of music is age-old, and so is the dispute of its ownership. In a historical account, Attali (1977) delineates its power struggles through French history – from book copyists with their monopoly for reproductions of scores opposing and destroying printing presses in the fifteen hundreds; through the monopoly of publishers; to the monopoly of the Royal Academy of Music in the eighteenth century. The creators themselves, the composers, did not gain any rights for revenues from their own music until mid-eighteenth century; and it would take the Revolution to give them legislative protection against unauthorized

reproduction of their work. The struggle did not settle there; government, publishers and the bourgeoisie kept the struggle of power over music alive into our time.

Controversy is in other words nothing new to music. Heated debates over the uses and ownership of music have followed about every manifestation of music, from score sheets to radio to vinyl and plastic discs. Digital files have proven to be no exception. Since the first mass-market mp3 player, Rio's PMP 300, was unsuccessfully litigated for its capacity to diffuse music illegally, a jumbled struggle over the control of digital music technology has unfolded, pulling it in many different directions. Some technologies have triumphed to the extent of market dominance, like the Apple iPod; yet others have suffered dismissal or even condemnation, like the implementation of copy-blocking technology in CDs. Herein lies the first of two major novelties in digital music's social construction; the number of actors involved has expanded and moved as its technology has entered the on-line community. New platforms on which to produce, diffuse and consume music are making themselves available, and with them, new enterprises, organizations and individuals gain influence.

Secondly, among these new and changing actors, the consumers of music seem to be experiencing a level of empowerment unlike that under any previous format. The availability of file sharing services, in which music and other digital material can be transferred at high speeds and low or no cost, lets them bypass both established music industry and money transactions in their quest for culture. While power struggle and illegal copying have always surrounded music as a product, the diffusion of illegal digital copies – its pace and extent made possible by the Internet – is vastly superior to those of past manifestations.

The history of the compressed music file that we know as mp3 today started at the Fraunhofer Institute in 1988 (Sterne 2006; 829). An industry funded initiative, the creation of the MPEG standard was a clever way to reduce the size of music and film files. Sterne notes the auditory politics of this compressed format; the central idea is to remove 'unnecessary'

information from the file through various filtering processes. In effect, it involves a deterioration of sound quality – sounds that fall outside the range of normal human hearing are stripped away in order to save space. The effects are largely unnoticeable to the listener, but would easily be noticed by a professional, e.g. a sound engineer (ibid; 885). Rather than an improvement of fidelity, it provides an improvement of *portability*, partially at the expense of fidelity (McCourt 2005; 250). But the technology, first met as a blessing, would turn on the industry.

Before the creation of Napster, the first widely used file sharing application, digital files' potential for mischief was relatively limited. The music industry had confronted user-made copies as CD burners became standard household equipment, and arrived at treaties ensuring royalties from sales of blank CDs, similar to those concerning blank tapes in the eighties. Despite the existence of a black market for pirated CDs, the record industry experienced strong growth throughout the nineteen-nineties, mainly driven by CD sales. After Napster, things started changing. Sales statistics from IFPI show a dramatic decline in transactions of physical music media, which is not being appropriated by rising digital sales⁴. This despite the growth of several other revenue sources, like licensing of music to be used in computer and TV games, films and commercials, and sales of mobile phone ringtones.

These quick and radical changes in the music market have provided pressure for similarly quick and radical adaption from the recorded music industry. Uncertainty towards digital business models and their profitability in the face of file sharing may however motivate music producers and vendors to resist such changes – as argued by e.g. Hall (2005).

There are varying views on the effects of digital music technology. One popular view is that of file sharing technology as *disruptive* (Marksten 2005; 17); an improvement of music as a product in a manner that is unexpected to the market. Expected or not, there is no quarrel

⁴ <http://www.ifpi.no/statistikk/Diverse%20statistikk%20IFPI.pdf>

that the Internet has been a catalyst for massive change in the recorded music market. The term ‘paradigm shift’ has even been applied for the effects of Internet technology on the economy; and whether or not such a description is fitting⁵, the influence of innovations made possible by the Internet stands undisputed. But even in the academic realm, there is no consensus on what is actually going on in the music market as a consequence of recent developments in music technology – nor what these developments are. The following chapter investigates in further detail existing research on digital music and file sharing and their effects on the music market.

2.3 Previous studies on illegal copying, digital music, and file sharing

In the years succeeding Napster’s success, a widening range of literature has emerged on the subject of the digitalization of entertainment media. New economic theory has been invented (and existing theory modified) to fit the unique characteristics of the digital age. Scientific endeavours have been many to measure its scope and impact, with increasing focus on the growing market for illegal file-sharing.

This paper does not aim to resolve the legitimacy of the music industry nor the file sharing communities, and does not speculate about the morality of any actors. While profitability and sustainable growth are presumptions in many empirical studies, efforts have been made to include material which focuses more on non-economic factors, such as the social utility effects of file sharing – ideological arguments in the debate between relevant actors should not be overlooked, and are maintained in the literature summary and analysis.

⁵ Using definitions provided by Freeman and Perez, the Internet may be better identified as a *change of ‘technology system’*: “...far-reaching changes in the technology, affecting several branches of the economy, as well as giving rise to entirely new sectors. They are based on a combination of radical and incremental innovations, together with *organisational* and *managerial* innovations affecting more than one or a few firms.” (1988; 46)

Much emphasis and controversy has been handed the question of whether file sharing is in fact harmful to music. By itself, it is a complicated issue, with many possible angles and means of measurement. Ideology has a big say here; if one prefers looking into social effects of file sharing, the variables for measurement might look very different than if one wants to measure effects at a purely economic level. For example, Peitz and Waelbroeck find that while “digital copying is likely to affect industry profits, [...] Network effects tend to make end-user copying welfare-increasing⁶” (2006; 473). Depending on whether one values profits or utility, the conclusions of a study may therefore differ radically as to the ‘good’ or ‘bad’ effects of file sharing.

By this logic, discrepancies are to be expected in the various answers to this question. Such an assumption does indeed stand its ground when looking through the existing literature. One may call this situation a ‘problem of modelling’; although there are numerous efforts towards a plausible (and often mathematical) representation of the impacts of file sharing, an array of social variables complicates the picture.

Also the economic effects of file sharing are disputed. Assessing a question as whether file-sharing is harmful or beneficial to (or has no influence towards) the record industry, sources can be cited to support most any view. Independent studies have argued that file-sharing is harmful to the industry (Liebowitz, 2006; Peitz and Waelbroeck, 2006) and not harmful (Oberholzer and Strumpf, 2004; Tanaka, 2004). It has been argued, but hardly proven, that aggregate losses in music can be compensated through appropriation or demand externalities (Boldrin and Levine, 2004). Some conclude that enforcement of copyright laws may reduce file sharing (Chiang and Assane, 2007); others that it mitigates profits (Takeyama, 1994)⁷. Such discrepancies can sometimes be traced to different valuations of *what* is measured, and in which context. Should welfare effects be involved in the calculation,

⁶ Peitz and Waelbroeck do not separate the markets for music, film, video games and software.

⁷ Takeyama’s findings do however belong to times before any noticeable music file sharing activity, and could therefore lose relevance in the current environment for music.

or should one take a purely economic stance? What are the significant variables – do for example network effects apply in the case of music? In the discussion of copyright enforcement effects described above, the conclusive gaps stem from differing angles; while Chiang and Assane (2007) derive their conclusions from university students' perception of risk of litigation, Takeyama (1994) involves welfare effects on the general populous. Due to different points of departure, the authors thus arrive at different conclusions. Could it from these two reports be concluded that copyright law enforcement is 'good' or 'bad'? Not from the looks of it.

Another controversy highlighted by these two articles is that of possible *network effects* or *network externalities* – the heightened value of an artefact as its users increase in numbers. As previously mentioned, Peitz and Waelbroeck conclude that digital copying may have a positive effect on welfare. The existence of such effects are however uncertain. Amongst others, Liebowitz (2006) argues against it.

There seems to be some disagreement as to how network effects should be defined; Hall (2006) brings up the link between network effects and the *drive for standards* within certain technologies, such as video tape players. It is argued that positive network externalities derive from the desire among users to have products that are co-compatible. In this respect, network externalities certainly exist; as argued in the introduction, the history of recorded music formats have predominantly favoured one dominant incarnation at a time. While Hall treats network effects as a sociometric variable, Liebowitz takes an econometric approach, resulting in different outcomes when applied to recorded music technology.

The case of Takeyama versus Chiang and Assane brings to light a third issue; the astonishing pace in which music technology currently appears and diffuses. The two studies are thirteen years apart; though certainly considered a short time in many scientific disciplines, it might be long enough to radically change the conditions of music technology

diffusion. While Rosenberg (1972) observed the general slowness of diffusion of innovations, file sharing technology has disseminated quickly, spreading to hundreds of millions of users in just a decade. The reasons for this unusual speed may be numerous; Hall (2005) mentions several conditions as driving forces for diffusion. Among these is the perceived benefits received from the new technology: The radio, Hall argues, diffused quicker than the automatic clothes washer in the 1920s' USA due to the substitutability of each innovation. While manual clothes washers were not perceived as vastly inferior to the automatic ones, there was no good substitute for the radio. By the same logic, the technological advances that digital music files present compared to physical formats may aid in quickening diffusion, as there is little substitutability for these formats (at least in the digital market). Hall also points to Tellis, Stremerch and Yan (2002), who conclude that entertainment or information consumer durables diffuse more rapidly due to status enhancing characteristics. There may be a case for similar effects in file sharing, all the while it enables users to collect music at speeds and costs far superior to other alternatives: Collecting is a powerful driving force in music milieus, perhaps even more so in a digital environment, as argued by McCourt (2005).

And while users may well see such benefits early on, the industry may see it differently: "[...] Under uncertainty about the benefits of the new technology, there is an option value to waiting before sinking the costs of adoption, which may tend to delay adoption." (Hall & Khan 2003; 2) Such thinking may strengthen record companies' reluctance to act on digital music opportunities, and the presence of file sharing is liable to further erode trust in digital products.

Liebowitz (2006) discusses the history of measuring illegal copying in general and file-sharing of music in specific. He finds discrepancies similar to those mentioned above, and looks at the use of source data for an explanation. Firstly, he notes, parallels should not be drawn between the sharing of *files* and sharing of *music*. Although music accounts for a large

portion, transmissions in peer-to-peer networks include books, games, software and an increasing (and by no means static) percentage of movies in digital formats. Distinguishing music files from all other types in an environment that favours anonymity seems an almost incomprehensible challenge. The shifting nature of demand for different files also renders an application of set ratios between them inefficient for measuring their relative dissemination.

Secondly, the base chosen for measurement may result in significantly varying outcomes. Liebowitz observes that US-based pollsters use very different means with which to derive their numbers of aggregate file-sharing activity. The majority measure the number of participants in file-sharing activities or networks. Others measure the users of certain programmes. Panels of users and surveys are the favourite means of counting – in other words, *inductive* processes are applied. A hazard is the possibility of unrepresentative feedback from the test groups, especially when taking into consideration the possibly perceived threat of litigation and opinionated bias from the subjects.

2.4 Literature Criticism

Existing research on the field of file sharing has so far been largely concentrated around two seemingly taxonomic groupings: The music industry and the users. Marksten confirms that academic work is mainly concentrated around user analysis based on survey data and econometric analysis based on structural data (2005; 11). While both parties are obviously important to the creation and diffusion of music, it would seem that this approach spurs treatment of these actors as independent from one another. Several complications do however occur in such taxonomy: Firstly, it assumes a communicatively disconnected or horizontal relationship between producer and consumer. This does not necessarily realistically reflect the situation; indeed, Beer (2008) notes that, with the success of the Internet, the communicative distance between users and musicians has become greatly diminished. He even observes that

“[musician Jarvis Cocker’s home page on MySpace.com] *is not solely a portal through which the fanbase can communicate with the popstar, or a space where the popstar (or the music industry) can communicate information to the fans. We see instead the formation of networks around these well-known performers.*” (ibid; 231) Also, in a market where independent labels and artists gain an increasing share, informal channels of communication and direct user-producer interaction gain relevance. Bugge notes that, in the Norwegian market, “[...] *the process of mergers and acquisitions among the major record companies makes room for more national, independent labels.*” (2003; 66)

Secondly, the taxonomy takes for granted a highly homogeneous environment of music companies. Although the ten largest actors comprised 90% of the Norwegian market in 2002⁸, there is still a multiplicity of smaller companies operating at a national level. 90% of all music companies in Norway had less than ten employees as of 2002. The variously sized enterprises are also largely separated into two different representative bodies: IFPI for the larger (and often multinational) ones and their subdivisions, and FONO for smaller entities.

Thirdly, a user-producer taxonomy downplays the relevance of other actors with a voice in the market. Political and legislative issues have occasionally been involved in analysis (e.g. Pons and García, 2008, Walle 2003), but ideological organizations, unions, media and influential individuals are largely overlooked. One can ask how the ‘market’ should be defined; is it solely an economic realm, in which those with monetary interests reign exclusively? Such constraints fail to recognize the larger social structuring of technology. While e.g. Marksten recognizes the need for including “other groups and instances” (2005; 16) in a social analysis of music, specifically within what is defined as ‘the market’, and Normann (2005) sees the relevance of small and medium-sized enterprises in a discussion of relevant market actors, there is a noticeable lack of attention directed towards

⁸ NIFU/STEP 2003; 66

groups that may fall outside the traditional dichotomy. In the wake of file sharing especially, interest groups with a specific allegiance neither to consumers nor industry have established themselves in public debate. Also, as will be discussed in more detail later, the media, serving as a platform and a filter for the debate, has been neglected in scientific research.

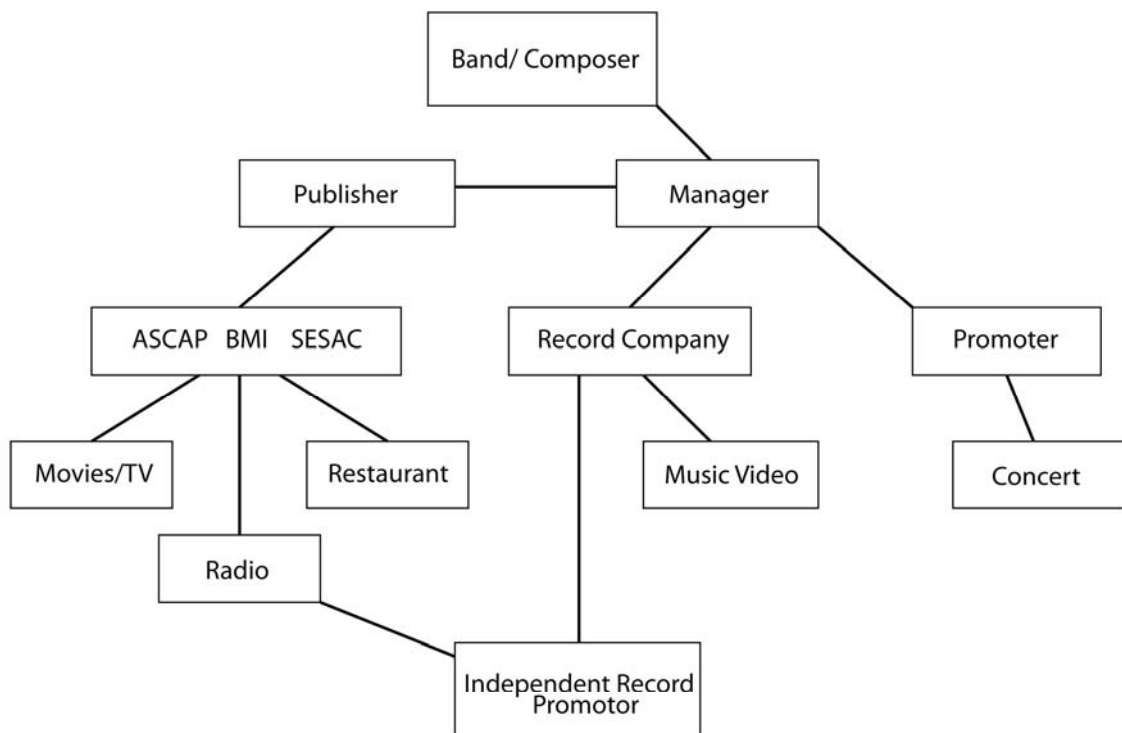
The social structures surrounding music are not the only complicating factor; the technological manifestations of music are themselves far from generic. The shapes which recorded music may take in the digital market, and the complications of such variety are discussed in the following chapter.

3. Theoretical framework

3.1 The technological characteristics of digital music

Connolly and Krueger (2006) present the following image of popular music:

Model 1: Organization of the Popular Music Industry (Connolly/Krueger 2006, pp.672)



Although specifically adapted to the American market (and *popular* music), the model nicely illustrates the complexity of music as an economic product. Its many uses are manifested in a variety of products and services from which monetary gains are possible – from end-user record and digital music sales and fan merchandise, to radio and TV play, commercials, and use in public venues, to live performances, even second-hand sales. There is no single value chain for music, but several.

In these different economic manifestations of music, the ‘digital music revolution’ has a varying impact. This thesis is mainly concerned with the effects of digital music technology on the market for *recorded* music; that is, CD (and other physical formats) and mp3 (and other digital formats) sales. Both literature review and the selection of informants take this angle of approach. Other sides of the music economy will however be touched upon, in order to provide a framework for the recorded music industry. It may also be argued that the boundaries between various musical products and services, and their relationships, are changing in the digital marketplace (e.g. Beer, 2005). In this context, it is necessary to continually reassess the affiliations between the manifestations of music in any academic work.

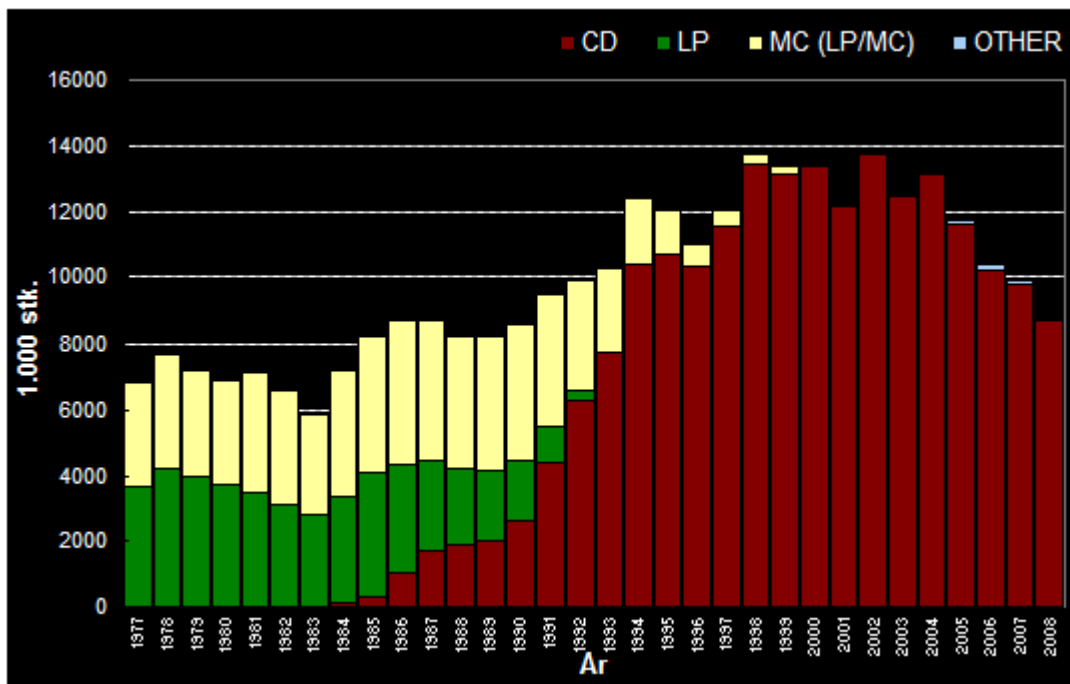
As has been established, existing research efforts within the frames of recorded music in the digital market are typically directed towards two topics: the economic impact of digital music and file sharing, and the relationship between users, digital music and file sharing. These approaches both involve a wide variety of angles and scopes, but have in common that they tend to separate the music market into users and producers, and refrain from delving deeper into the social traits of these two groups.

Each in their end of the typical value chain, the creators (in this case, the artists and/or recording labels) and the consumers, are doubtlessly significant in any market. As groups, they are also very large. Is there an incentive to believe that users and producers of music possess, as groups, homogeneous views of and relationships to digital music technology? Not necessarily. Bijker (1995) describes how technology is subject to *interpretative flexibility* – varying perceptions of its uses (“that which constitutes its working”; *ibid*; 281). As an example, explaining the development of the safety bicycle in the late nineteenth century, Bijker shows how different groups of users, in relating different problems to the existing bicycle models, affect the bicycle’s development in different directions.

Recorded music experiences the same forces of change. The perceived uses of music affect actors' incentives to change its technology. Digital music technology is however also affected by two very special circumstances; the drive for homogenization, and user-made technology competing with industry-made alternatives.

Homogeneity of formats

Model 2: Annual sales statistics by sound carrier. Source: IFPI (<http://www.ifpi.no/statistikk/images/lydbae4.gif>)



Firstly, recorded music is prone to a drive for compatibility of formats and playback technology. Without delving into the social processes underlying this drive, suffice to say that historically, few recorded music formats have co-existed for long, without one becoming vastly dominant and the other(s) marginalized⁹. Model 2 shows how the CD did in less than a decade become the dominant pre-recorded music format, to an extent that quickly overshadowed all other formats.

⁹ As shown in model 2, Long Play records (LPs) and music cassettes were for a short period of relatively equal popularity. This can however be attributed to the strict differences in portability (favouring the cassette) and sound quality (favouring the LP) of these formats, meaning these two formats did serve two rather separate markets. The CD, however, is both relatively portable and high-fidelity.

While this notion is to some extent challenged by recently renewed growth in the vinyl record and cassette tape markets, CDs have been vastly superior in unit sales since the early nineteen nineties. Thus, in addition to the sometimes conflicting influences spurred by different social groups on music formats, there is also reason to assume a push for *one common technical solution* for all or most of these groups. Rather than produce multiple solutions to suit individual tastes, the technology is pressured towards some kind of compromise in format, or at least strong co-compatibility between formats.

User-made technology

Secondly, and quite uniquely in musical history, consumers have taken the development of technology into their own hands. Rather than affect and react to the solutions offered by a range of producers, the users have created their own technological solutions for the digital market. Since Shawn Fanning gave life to file sharing service Napster, numerous services and programmes for sharing music over the Internet have received widespread attention and popularity. File sharing software, like uTorrent, Soulseek and Kazaa, and search engines, like Torrentz.com, Waffles.fm¹⁰ and the Pirate Bay, were all created and run by groups and individuals outside the framework of the traditional music producing industry. Typical of these services is that they are free to attain and use, and are either non-profit or gain revenues from other sources than music sales. The result of this surge of non-industry and often non-commercial technology is a regime where music consumers have shifted from merely being users, to being creators of technology – with the empowerment it entails.

¹⁰ Currently out of service. It would seem this file sharing portal is closed down for good.

3.2 Product or service? The schizophrenia of digital music

Normann observes that, faced with diminishing returns on CD sales, “the industry is now seeing examples of music being used more and more as a service to drive the sale of other products or services.” (2005; 10) Kusek and Leonhard (2005) ask whether music should be considered a product at all, or if its modern manifestations fit better the traits of a service. The argument is supported by McCourt (2005), who notes that licensing is increasingly replacing sales as a revenue source. It is an observation with some interesting implications – the definition of music may be changing altogether. Shedding its physical form, does it take on both the ethereal and tradeable forms of a service?

In its basal definition, digital music is still a tangible asset. It still belongs to the material world, although in sizes so small it is near imperceptible. Sherburne (2003) favours the phrasing *micromaterialization* rather than *dematerialization* of formats. Still, in our uses of it, digital music cannot be held, it offers no touch to the skin. It has moved from occupying a visible space to one which is minimized and out of reach, within the cache of a computer or digital music player. And music itself is inherently *intangible*. What, then, is the product? Normann suggests that it is not the sound it self, but the *sound carrier*; that is, the format a recording takes in order to be traded and owned. Building on Mumford (1967) and Sofia (2000), Sterne (2006) argues that an mp3 falls under the term *container technologies*; in fact, all music formats are technology designed to contain other technology. Sterne also distinguishes the mp3 from previous formats, naming it a ‘container for containers’ (2006; 828); the format is a carrier of sound recordings.

It thus becomes viable to argue that traditionally, music is by itself not a product for the record industry – in necessitates supplementary products in order to take a tradable form. This also stands its ground in a digital market, all the while the music requires both hardware (PCs, portable players etc.) and software (albeit often free) to be used.

Thinking of music in this manner brings to light some distinctions. Suddenly, it becomes necessary to distinguish between two definitions: that of music as an intangible entity, with many of the characteristics of an unrefined raw material, and that of music as a processed product, using some manner of technology to enable playback. Traditionally, the real-time consumption of non-recorded music makes it economically relevant only in the “live” setting of a performance – the physical incarnations of music are the main concern of the recording industry. The obvious exception is radio broadcasts, from which the listener’s experience of music derives from “live” play rather than a physical format, albeit still requiring a technological medium (the radio) in order to be captured. While digital files are still both perceived (Sterne 2006; 832) and traded as physical products, they also keep a heritage from radio play; Internet radio is a well-established institution in the on-line community. But potentially even more influential to the perception of music as a commodity is the technology at the forefront of current developments in the market. So-called ‘streaming’ music services, in which no file is exchanged, but enjoyed by tapping into a ‘live’ broadcast over the Internet, are becoming an increasingly popular solution among users as well as industry actors.

In short, it is necessary to keep a bifurcated view of digital music. Despite Liebowitz’ (2006) argument that the radio has rarely been a direct source of profit for the recorded music industry (contradicting Connolly and Krueger’s (2006) findings), streaming services are often emphasized as a promising business model for the digital music economy. Recorded music takes on the forms both of a product and a service in its various manifestations, both traditionally and in the digital age.

3.3 The politics of artefacts

The history of Digital Rights Management technology¹¹ on CDs illustrates how music technology is subject to policy in its development. One can argue that music is itself a political tool – as in the debate over artistic rights (e.g. through System of a Down’s “Steal This Album” record, and Radiohead’s “In Rainbows” user-priced download experiment¹²) – but even more so, through the politics of the technology surrounding it. On the surface, a CD is just a piece of plastic – the surface may even be completely blank, there certainly are few external signs to suggest that it is designed to impose anyone’s agenda on you. But when you insert it into your computer’s CD player in order to digitize the material, it may refuse to copy onto your hard drive. It may not play properly on your desktop or on your car stereo; it can even cause harm to your equipment¹³. Technology which you own, bought and paid for, refuses to cooperate the way you’re accustomed to. Your own agenda is clear; you want to transfer the music between the two media. Something has been altered in one or both of the interacting components to make them in- or less compatible.

The result stems from the politics of these artefacts¹⁴, as denoted by Winner (1986). In contrast to our common notion that technology is inherently neutral, “... a given device might have been designed and built in such a way that it produces a set of consequences logically and temporally *prior to any of its professed uses*.” This is particularly true in an increasingly computerised environment – the ever-increasing complexity of its technology offers a growing number of portals for inducing control over its functions. Schmidt (2007) provides a scrutiny of the possibilities for computer manufacturers and software writers to embed politically stimulated features into their creations – and they are virtually endless. In reality,

¹¹ “Encryption technology that permits content owners to control user access to digital content, including the issue of licences and decryption on the client device.” (CEN 2003; 7)

¹² see e.g. Anderson (2009; 153) for a more detailed account of the latter

¹³ <http://firefox.org/news/articles/1045/1/What-is-DRM-and-why-should-I-care/Page1.html>

¹⁴ *Artefact/artifact*: A frequently used term in STS literature, relating to some physical technological manifestation.

such efforts are restrained both by governing legislation and norms, but such conditions far from eliminate them. The record and music player industries make good use of such possibilities, but have frequently faced defeat in the courtrooms over their use of copy and playback control. For example, Sony BMG was forced to remove copy control technology from CDs and to pay class-action claims for their use of so-called rootkits¹⁵; Apple to make files sold in the iTunes digital music store interoperable with other music players than their own iPod¹⁶.

3.4 Modelling music: How to understand the shaping of digital music

The implementation of DRM in sound carriers is a result of various actors' intentions to block you from copying your music (and possibly to make it available on the Internet). If, as a reaction, you search the Internet for a programme which allows you to make a copy, it is a result of your own intentions, and those of the creator of the programme you decide to use, to make copying possible, and to denounce the framework created by the industry (and/or legislative forces). Furthermore, your decision to do so is not forged in a social vacuum, but under the influence of social forces. Bijker, Hughes and Pinch (1987) define these forces as *social groups*, and although the wording may be somewhat misleading in certain settings (due to its innate exclusion of influential individuals), the 'social groups' embody a main characteristic of the social shaping of technology; that the influences of actors with similar agendas towards or views of a technological artefact accumulate to affect it in one particular direction. In this respect, actors work as a group in affecting technological change, even if lacking other social bonds between themselves.

¹⁵ <http://www.eff.org/cases/sony-bmg-litigation-info/attachments/settlement-agreement>

¹⁶ <http://www.telegraph.co.uk/technology/apple/4143722/Apple-to-allow-all-iTunes-songs-to-be-used-on-any-MP3-player.html>

In taking your decision, you are yourself part of a group exercising influence on the development of these artefacts. By downloading the copying programme, you render the ‘non-compatible’ programme less successful; it loses a tiny portion of its market share and experiences a marginally higher pressure to remove copy blocking technology in order to regain that share. Arguably, the action of one user has such diminishing impact that it is pointless in a grander scale. As part of a larger group, defined by its members’ common view of the specific artefact (CD), he or she however participates in exercising significant pressure on the shaping of the technology.

In other words, the members of a ‘social group’ have a shared perception of the uses of a technological artefact. When they wish to change the technology, this is due to a perceived fallacy in these uses shared by its members. For a group that does not intend to exercise CD copying or experiences trouble with their car stereos, copy blocks are irrelevant (lest on a purely principal level). For the creators and facilitators of the blocking technology, an economic incentive shapes their preferences – the creators selling their creation, the industry wanting to discourage market-damaging and profit-reducing activity. The dynamics described above – the uses and problems related to technologies by social groups – form the foundation for the Social Construction of Technology theorem (SCOT), as defined by Bijker et al. (1987). In our example of copy blocking technology, the CD proved problematic for record industry actors due to the ease of copying emerging as the CD burner became a household item. The copying was the “problem”, and the copy block a solution. But this solution was troublesome for those doing the copying, those who could no longer play CDs on their car stereos and computers, and for governments who worried for the consumers’ deep-set right to make free use of their own belongings. What was worse, the resulting narrowing of uses reduced consumers’ already stretched perception of value in CDs. A substantial pressure built up to ban the use of such barriers of use. As the iPod and other mp3

players became dominant in the portable music player market, necessitating close compatibility between CDs and computers, implementing blocking technology became increasingly an act of shooting oneself in the foot for record companies. Computers had simply become too central a tool for experiencing music to be excluded. In February 2005, the Norwegian ministry of Culture and Church proposed changes in the intellectual property legislation that allowed for consumers to breach copy blocking technology if it made the right to copy the CD illusory.¹⁷ Today, CDs with copy blocking technology are far less prominent in the Norwegian market. The industry's problem of illegal music copying is alive and well, having spread to the Internet and data files, and the industry seeks new ways to battle it – to influence the shape of technology surrounding recorded music.

The central theme of SCOT is that technology occurs and develops in the context of social groups, and that these groups influence an artefact to best suit their needs and desires. For markets necessitating technological homogenization or co-compatibility, such as music formats, the resulting technology must necessarily derive from a form of compromise between various groups – a standard format, or technology that co-operates. One example is the movie industry's recent consensus to embrace the Blu-Ray format for next-generation home entertainment, abandoning the competing HD-DVD format¹⁸. The particular problem that has arisen for those investing in music and some other experience goods (movies, computer games etc.) is that consumers have taken matters into their own hands, creating solutions for themselves omitting both traditional markets market and law.

What Winner (p. 28) and Bijker have in common is the realization that social processes are catalysts for technology – that an artefact is both moulded under the influences of differently directed forces, and that it carries these influences into its physical existence. People are not simply reacting to change; they also induce it. For music, this means both the

¹⁷ http://www.regjeringen.no/se/dokumentarkiv/Regjeringen-Bondevik-II/kkd/Nyheter-og-pressemeldinger/2005/adgangen_til_a_kopiere_til_privat.html?id=256143

¹⁸ See e.g. <http://www.aftenposten.no/forbruker/digital/nyheter/dvd/article2265655.ece>

legal and illegal products and services surrounding it constitute the results of relevant actors' intentions toward it.

But who are these relevant actors? Star (2001) discusses the phenomenology of power. While many voices may be raised, what matters is whose voice is *heard*, she argues; power lays in convincing the right people. Millions of people may be disgruntled at the state of their surroundings, but without organization, without the right channels of communication, the right language and real weight behind their demands, all their opinions amount to wont. The pressure exercised to make recording companies ban copy blocking technology is the result of individuals, organizations and even government organizing under a shared view. Simon Frith argues that through the history of music, "*technology determines how the competition for a voice is organized but does not determine who will be heard or how what is heard will be interpreted.*" (1986; 278)

When the problems related to a technology are solved, it is 'stabilized' in the minds of relevant actors. As the drive to change the technology concurrently disappears, actors attain *closure*, a term dubbed by Bijker et al. (1987). Closure in technology occurs when "[...] *a consensus emerges that a problem arising during the development of technology has been solved. When the social groups involved in designing and using the technology decide that a problem is solved, they stabilize the technology.*" (ibid; 12-13) Closure is however not a static, one-off process, but one in constant development, as new influential actors emerge and new problems are related to existing technology.

Both with the innate politics of technology and the social construction of technology in mind, it becomes clear that this is a process of mutual influence: while we work to shape technology to our liking, the technology itself affects our means and motives to do so. The status of twenty-first century music is an example of this relationship as clear as any. Solutions to limit music's distribution on one side and to facilitate its open sharing on the

other, its surrounding actors are divided into a number of differently directed forces struggling to affect its technological manifestation. Who make up these forces, in what direction they are pulling and for what, are questions this paper takes aim to clarify. But how and where is this battle fought? This is the theme of the following chapter.

3.5 Where the voices sound

The channels through various influencers communicate their views and the arenas in which the debates take place are both highly relevant. Grabher, Ibert and Flohr, drawing on results from among others Callon, Méadel and Rabeharisoa (2002) and McMeekin, Green and Tomlinson (2002), observe that these arenas are changing:

The formation of tastes and preferences, the patterns of adoption, and the domestication of products or resistance, of course, are genuine social processes that are deeply enmeshed in a variety of networks. [...] However, the locus of these social processes – and this is novel – increasingly shifts to open arenas and public domains. (Grabher et al. 2008; 255)

This shift makes certain communication platforms more important, and others redundant. Simultaneously, the barriers to enter the debate are significantly lowered – but this does not mean it gets easier to be heard. One may even expect a reverse trend in some respects, a more transparent and accessible arena causing intensified competition to distinguish oneself. The channels through which one attempts to reach the masses, then, become the more significant. One apparent produce of such increased pressure on specific media is increased consumer orientation and focus on user-driven debates in online news services. In a related study (Trollsås 2009)¹⁹, I make a case-based investigation of the opinions expressed towards digital

¹⁹ Musikk-Kultur 10/09.

music by major domestic news services. Here, it is observed that domestic newspapers' on-line services have become both a significant platform for open debate on music through debate forums and feature articles, and a significant voice of their own, through editorial contributions. McCombs (2004) points out that in terms of affecting public opinion, newspapers emerge as more influential than TV in a majority of known empirical studies. The relevance of newspapers in a discussion of power in the Norwegian music market is further assessed in the chapter "Implications of the methodology – expanding the music scene" (p. 39).

3.6 Adjusted research questions

The approaches and insights attained through Science and Technology Studies provide a manner in which to address the problems presented in the research questions. Specifically, to the purposes of this thesis, STS theory can be used to form a revised set of research questions:

- **Who are the relevant organizations in the Norwegian music market, using a mode of selection offered by the SCOT theorem?**
 - How are they grouped into "social groups", as defined by Bijker (1987)
 - ...by existing literature?
 - ...by each other?
- **How do relevant actors relate to the technological artefact of recorded music?**
 - What problems do they relate to current music technology?
 - How do they relate to other relevant actors?
 - Are certain actors perceived to gain or lose relevance, within a definition of power as defined by Star (2001)?
 - **How do relevant actors seek to attain *closure*, as defined by Bijker (1987)?**

4. Research Design

Existing research on the topic of digital music in Norway is limited, but what does exist is relatively homogeneous in its conclusions. There is however a gap in the research – while solid efforts into a quantitative understanding of user behaviour have been made, qualitative approaches are noticeably absent. Case studies and interview-based research are needed to supply the field with more in-depth knowledge. Marksten concludes that “the need for *qualitative* research is, in my opinion, particularly strong.” (2005; 101)

A consequence of this asymmetrical body of research is a low emphasis on explanatory social factors, contra descriptive statistics aimed at mapping the situation. Whether “piracy kills music”²⁰ or not, qualitative studies may aid in identifying the driving forces behind the social conflict over music. One-sidedly quantitative florals of literature precipitate focus on broad common denominators in its segmentation. Case work and in-depth interviews have the ability to transcend standardized responses.

There is thus a present need for a qualitative look into the Norwegian music market. With an escalating conflict between users and producers in the new millennium, an approach valuing the attitudes involved becomes increasingly relevant. The somewhat limited, but solid existing empirical evidence on the topics of digitalisation of music and file sharing will assist in supporting or discrediting the findings of such a project.

Bijker (1995) describes two interdependent paths towards identifying the relevant social groups: The ‘roll a snowball’ approach and ‘follow the actors’. The ‘snowball’ method is an actively used method within sociology. With a number of pre-defined actors derived from relevant literature as point of departure, the researcher asks his interviewees who else they think relevant. – *In doing this with each interviewee, the number of new actors at first increases rapidly like a snowball, but after some time no new names will be mentioned – you*

²⁰ An industry-funded campaign to combat file sharing. See <http://www.piracykillsmusic.com/>

have the complete set of actors involved in the controversy.” (Bijker 1995; 42). ‘Following the actors’ is a manner of going into the actors in more detail. According to Bijker, a crystallized definition of actors into various groups will normally stem quite directly from the actors themselves, all the while they have a direct interest towards each other, and therefore have personal definitions of other actors. The researcher takes a more detailed look at the pre-defined groups in order to draw their boundaries and to separate them adequately.

This dissertation concentrates on a qualitative study of attitudes and values within the Norwegian music market. Discussions of such a personal character will necessarily have to be broad – an objective is to extract underlying currents in the market that are not visible through more standardized ways of measurement. At the same time, it is vital for the study’s credibility that it is fair and balanced. Subjects must have equal rights and opportunities to express themselves. In order to achieve such fairness, it is therefore important that some degree of standardization of method takes place. The *semi-structured interview* (e.g. Lund 2002; 148) offers a loose framework for interviews, without hampering the subjects’ freedom of expression, while providing them with an equal foundation for contributing. Using standardized questions, but still sporting the opportunity for further discussion between interviewer and informant, the semi-structured interview enables the interviewer to guide the debate towards central themes, while the interviewee is free to elaborate on them by their own will (and agenda).

Interviews were conducted between late November 2008 and mid-March 2009. Continuously, they were fully transcribed in Norwegian, before being translated and processed into a shorter text in English. While the form and frame of interviews are consistent, new candidates for interviews were gathered from the informants themselves, dynamically expanding the image of the Norwegian music scene in accordance with interviewees’ own perception of relevant actors.

The analysis has emphasized giving equal attention to all informants, and, to the extent that they are provided, quoting all opinions on any given subject, rather than discriminating parties that gain less interest from other actors. Rather, in the discussing the responses, opinions and actors that attain the broadest attention are given specific prominence. The ambition of such an approach is to allow market actors to focus on both themes and actors that they deem relevant without inhibitions. Some complications however arise from such a design, and require further discussion.

4.1 Implications of the methodology - induction

The choice of a qualitative approach normally implies a degree of *inductive reasoning*. Based on a series of separate observations, features are ascribed to a larger group. For a study based on such a principle to be relevant, when the representative of a group makes a statement, it must be possible to interpret this view as significant for this group. Kvernbekk states that “shared by all forms of induction is that we embrace something which is unknown and unseen” (Kvernbekk 2002; 22). Validity therefore easily becomes an issue in qualitative work – how do we make a valid assumption of one thing based on the observation of another? Lund (2002) involves the issue of interpretation, and asks: how legitimate is it to derive given attitudes in a person from given answers? Also, in parts of the questioning where the respondent is asked to represent an organization with staff of a certain size, how do the individual opinions expressed translate to the enterprise as a whole? These are complications that need to be addressed and minimalized in order to defend the methodology. In the study of an environment such as the music market, there are certain foundations to build the research upon, and to add relevance to the individual statement.

- *Formal behaviour of organizations*

Companies and organizations are different from individuals. Whereas, for example, the members of a testing panel for a new brand speak for (and answer to) only themselves, the spokesperson deployed by an organization is supposed to represent the enterprise as a whole. If expressively stated in communication with the organization, the selection of a representative can be expected to contemplate such issues. Therefore, in their answers, interviewees are likely to reflect the governing values of the parent company. In smaller enterprises, typically with only one or two managers, the representative is largely exempt from considerations for other staff in expressing themselves.

- *An existing body of research.*

Previous work provide pointers towards the social structure of the Norwegian market. Normann (2005) identifies certain industry bodies under which actors are organized as central to record companies' communication – specifically, FONO and IFPI (record companies) and TONO (artists). That such 'umbrella organizations' are central in communication processes is positive in the context of this paper – as it strengthens the idea that the spokesmen or –women of such associations will be representative of their member mass.

- *Pre-defined demographic groups.*

In addition to Normann's findings, other submissions to the literature have defined relevant social groups. In instances where a group of actors has previously been identified through some shared incentives, statements by a representative coinciding with these will be strengthened.

- *The decision makers' relevance.*

As noted in the theoretical framework, Star (2001) stresses that *power* is a central theme in social processes, and that power belongs to those that are heard. In settings where a spokesperson is not a viable option, speaking to someone high-up in the organizational hierarchy helps assure that the opinions expressed are directly relevant in the market.

- *Transparency of the term 'representative'.*

Finally, clearly communicating the wish to gain views that are at the same time personal and representative for the organization will function as quality control. In a standardized request e-mail to all actors²¹, it is clarified that the interviewees will represent their organizations.

4.2 Implications of the methodology – expanding the music scene

As previously noted, an issue which receives modest attention in current literature is the influences of news and consumer media on the music audience. In addition to the arguments made in chapter 3.5 for the significance of the news media as a platform for digital music debate, there is another case to be made for its relevance: among others, Marksten touches upon the social aspects of the media (2005; 14). In some ways, the media can do the SCOT theorem a favour, by introducing actors that could seem marginal to decision makers, yet may well be influential through channels that lay outside those of intra-industry interaction. A problem with SCOT could be a “prematurely closed circle”, in which certain groups are so focused on themselves and each other that they fail to take into account some that should be considered relevant. This goes specifically for actors that fall outside traditional market structures, not partaking in the economic processes it is normally concerned with, but who may affect the behaviour of users of recorded music. As discussed in the conclusion of this

²¹ All organizations approached for interviews were sent identically worded requests.

thesis, users must often be regarded as a ‘silent majority’ in the debate around digital music, not necessarily voicing their opinions in traditional channels, but nonetheless highly influential. The consumer-oriented media, in order to accommodate their audience, has a real interest in bringing forth individuals and groups who influence users, but evade attention elsewhere in digital music and file sharing debates.

The potential choice to include such media in an analysis of the music market however spurs certain complications. While an organization representative will be able to produce a limited number of references in an interview session, the media are in the habit of portraying a very wide array of actors. It necessary to make some selection from this list of actors, based on the amount of attention that they are given over time.

4.3 Population and Sample

The Norwegian music market holds two lucky conditions for a qualitative researcher: it is (by international standards) relatively small, and that it is spatially concentrated. In a setting where a relatively large part of the total market can be sampled, it is easier to make valid assumptions based on qualitative studies (as the level of induction is reduced). In addition to all the “Big Four” record companies – Sony BMG, Universal, Warner, and EMI – a very large portion of smaller companies operate from or have offices situated in Oslo. Bugge (2003) finds that 40% of all employees and 30% of all companies in the music industry are situated in Oslo, and Østlandsforskning (2008) that Oslo is overrepresented in terms of employment in the music sector.

These conditions facilitate intimate interviews with actors and representatives of such in Oslo, while still achieving a solid representation of the music industry and other actors.

Other actors are equally clustered in Oslo: Most national newspapers, interest groups in both ends of the political spectrum, and Norway’s biggest music retailer, Platekompaniet,

all have offices situated in the capital. It accordingly becomes a relatively simple matter to make a representative selection covering most of the cultural map of music. (Urospredere and Tellé Records, the only two contacted parties not situated in Oslo, expressed little interest in conducting face-to-face interviews or did not respond to requests. Urospredere was also represented locally through their collaboration with FriBit.)

4.4 Selection of interviewees: pre-defined actors and groups

The selection of informants is a two-stage process: firstly, actors that have already been deemed significant (and been categorized as groups) by relevant literature are approached. Using a terminology provided by Bijker (1995), these are henceforth referred as *pre-defined groups*, meaning groups already defined in existing literature prior to further analysis. Such groups of actors, in Bijker's logic, have already succeeded in establishing themselves as prominent in the market, as they are identified as such by researchers and empirical studies. As these actors are questioned about who other relevant actors may be, additional actors and groups are revealed. In this way, a social map of the environment surrounding a technological artefact is sketched firstly by academia, and further elaborated by the relevant actors themselves. The latter of these steps is what is dubbed the 'roll the snowball' approach. Upon a review of the informants' statements, it is then possible to derive actors and groups that are significantly influential in the market for music, and thereby liable to affect its technological development.

Who are these pre-defined groups, then? As has already been established, a general tendency in academic research is to divide the music market into two roughly sketched groups – the 'industry', typically referring to music recording companies and major vendors, and the consumers. This may be connected with the observation that the debate on file sharing has largely been concerned with the technology's effect on the market (Marksten 2005; 17).

Also, legislation and legislative bodies are brought up by some academics (Pons and García, 2008), and discussions over legal issues surrounding digital music and file sharing clearly present in the literature (e.g. Keuvelaar 2007²², Walle 2003). Legislative government and the bodies responsible for enforcing law should therefore be seen as significant parties, directly or indirectly, through the attention they receive in relevant literature.

In conclusion, one can discern three social groups soundly defined in existing academia, on which initial interviews are focused: the ‘industry’, including music producers, sellers and (to a lesser extent) artists; users/consumers of music; and legislative government and law enforcing bodies. The media, and particularly newspaper media, can also be considered an important group of actors (as discussed in chapters 3.5 and 4.2) – but as literature on media influence on music in specific is more or less non-existent, the relevance of newspapers is uncertain, and such media’s significance as a social group must be evaluated against the attention given it by other relevant actors before settling their potential relevance.

Some specific actors stand out in research on the Norwegian music market; the industry is well-represented by specific organizations or agencies. Producers of music are frequently synonymous with IFPI²³ (International Federation of the Phonographic Industry) and FONO, musicians with TONO. Normann (2005) also finds that digital content distributor Phonofile, a branch of (but organizationally separate from) interest organization for independent record producers FONO, is an influential actor in Norway’s digital music market. FONO is, alongside IFPI, one of the two large member organizations for record producers in Norway.

To the extent possible, though, umbrella organizations should not be made sole representatives for their member mass – even if it is in organized forms actors have the strongest voice. Representatives of both large and small music publishers should be involved,

²² In Schmidt, Dolfma and Keuvelaar (2007)

²³ In addition to the “Big Four”, IFPI’s Norwegian branch has 11 further members – including the Internet label Nordic Records, who is represented in the selection of interviewees.

in order to test whether umbrella organizations are in fact representative of their members, and to provide a broader foundation for analysis of the industry; and in accordance with e.g. Normann's (2005) argument on the relevance of small and medium-sized enterprises in a discussion of relevant market actors. Individual enterprises are typically represented by the four largest recorded music companies, commonly referred to as the "Big Four"²⁴.

International conglomerates, these companies are also the largest in the Norwegian music market²⁵. They are organized in the umbrella corporation IFPI, an organization strongly concerned with "safeguarding the rights of record producers"²⁶. Companies represented by IFPI are responsible for more than 70% of Norwegian record releases (Bugge 2003). FONO represents many of the record producers outside the Big Four and IFPI's members, and Phonofile does so in the digital market.

The definition of music vendors in the digital market is often confined to Apple's iTunes store. Domestically, policy making on the subject of music is shared between the Department of Justice and Department of Church and Cultural affairs, while law enforcement in intellectual property rights matters is typically handled by KRIPOS, a special investigations branch of the police. The specific emphasis put on some individual actors in the literature however provide them with particular relevance: Apple and Phonofile are among these. In addition, 'traditional' music outlets selling CDs and other physical recordings should be deemed a significant party in the music market, but are not represented by any of the abovementioned organizations; therefore, at least one such actor should be included in the survey.

While the confines of this master's thesis do not allow for an extensive review of music consumers' relationship to digital music, some users may be represented through

²⁴ Formerly the "Big Five" – Sony completed its acquisition of the fifth major actor, Bertelsmann Music Group (BMG) in late 2008.

²⁵ It should be noted that 'the Big Four' are all conglomerates, or parts of conglomerates, with shares in a variety of entertainment media. As such, neither can be said to rely solely on music sales for income.

²⁶ http://www.ifpi.org/content/section_about/index.html

bodies in which they are organized, or which advocate users' interests. In terms of who is heard in the market, such organizations are likely to be central to giving users a voice, particularly if such efforts are recognized by other actors, as the 'roll the snowball' method is applied.

Based on these observations, in the selection of interviews emphasis was put on finding representation for small and medium-sized enterprises (SMEs) among the record industry (including record and digital music sellers) in addition to large corporations; for legislative and law enforcing bodies; for organizations representing music consumers; and for other organizations deemed significant by relevant actors. In addition, responding to the previous discussion over their significance, and the attention given to them by informants, certain newspapers were also approached. The following companies and organizations were included in the field work:

4.5 Organizations and representatives included in the study

Industry organizations:

- IFPI Norway, by director Marte Thorsby
- FONO, by chairman Larry Bringsjord
- TONO, by manager of legal affairs, Irina Eidsvold Tøien
- Phonofile, by managing director Erik Brataas

Major record companies:

- EMI Norge, by New Media manager Jarle Savio²⁷

Record company SMEs:

- Nordic Records, by sales and promotion manager/ co-owner Thomas Müller
- Rune Grammofon, by founder and manager Rune Kristoffersen
- Artspages.com, by managing director Dagfinn Sætra

Record vendors:

- Tiger, by daily manager Kristian Kallevik
- Platekompaniet, by Internet accounts manager Espen Lauritzen

Legislative and law enforcing bodies:

- KRIPOS, by police solicitor Eirik Trønnes Hansen

Newspapers/ media:

- Dagens Næringsliv (IT desk – DagensIT), by edition manager Jonas Blich-Bakken

Independent interest organizations:

- Elektronisk Forpost Norge, by manager and president Thomas Gramstad
- Fribit, by daily manager Sverre-Arne Dragly

²⁷ At the time of publishing this paper, Savio has a somewhat different position in a&r/marketing at EMI.

4.6 Design and implementation of interviews

Interviews are divided into four parts. Initially, actors are asked to present themselves and the organizationd which they represent. Questions regarding the organization include an inquiry of partisanship and internal agendas, in order to establish possible self-perceived links between actors.

The subsequent sections correspond to different parts of the research questions. In the second segment, interviewees provide a list of what they see to be relevant actors in the music market, and what they hold to be fact about the situation in this market. This completes the selection of actors initiated by the identification of relevant actors in existing literature – relevant actors identify other actors that they deem relevant, in accordance with the ‘roll the snowball’ method proposed by Bijker (1995). Queries include providing an outline of the situation in the music market, in order gain some understanding of informants’ use of sources and how they relate to current issues in the music market. Also, interviewees are asked to define what they believe to be the largest challenges in the industry, in order to identify the *problems* they relate to existing technologies in the music market – also in tune with Bijker’s approach.

In the third section, informants are asked in more detail about personal attitudes towards various central actors, in an attempt to attain some comprehension of social relations, and a more in-depth view of relevant actors, in accordance with the SCOT theorem.

The fourth and final segment explores how informants seek to attain *closure* of recorded music technology, within the definition of the term provided by Bijker (1987), of a situation where a technology is stabilized as the problem(s) attributed to it are eliminated. The interviewee is asked what must be done to improve the current situation, and who needs to be involved in this process. Answers to the latter of these questions provide a base for comparison to the definition of relevant parties given previously, enabling an assessment of

whether some actors are perceived to gain or lose relevance in an evolving constellation of actors.

The interviews are thus designed to collect the information needed for a complete analysis along the outlines of methodology suggested in the Social Construction of Technology theorem.

4.7 What They Say – Interpretation of language and terms

The use of terms and denominations among interviewees may vary, even when covering similar or identical topics. Terms like ‘record industry’ and ‘music industry’, ‘artists’ and ‘musicians’ may not only have separate articles in the dictionary; they may have radically different interpretations between actors, or actors may not separate them at all. Depending on their background and person, some may have a clear conception of the differences between for example a vinyl record and a CD; others may elude such a distinction altogether.

One must also be aware of the differences in definition of a ‘group’ among scholars and studies. While Bijker et al. (1987) define their ‘social group’ as one identified by a shared voicing of a shared view, referrals to groups of individuals, enterprises or organizations elsewhere are often based on other (and frequently less concrete) criteria. It is one of the objectives of this thesis to investigate whether the values and attitudes ascribed to various groups in the literature are in fact valid for the group as a whole. Furthermore, this observation implies that while relevant actors identified by existing literature may readily be used for SCOT’s analytical purposes, instances in which they are grouped should be approached with more care. It is therefore central to the analysis that a critical assessment towards the segmentation of social groups provided by existing studies be made, comparing it with the results emerging from interviews to either strengthen or weaken their validity.

With the insights such a comparison may provide, it seems counter-productive to create barriers for expression by establishing definitions for each term prior to the interviews. It can be argued that the meaning of a word is defined by that attributed to it by its users, and looking into how various terms are used by the interviewees is relevant for understanding their perceptions of music and the music market. It is however important to be aware of the possibility for different interpretations of the same words and terms in the analysis of their responses.

5. Analysis: the social construction of digital music

The following analysis is divided into three categories, based on the research questions: The interviewees' own identification and presentation of relevant groups and actors; an elaboration of these groups and actors' relations to digital music technology, and each other; and identification of actors' aspirations to mend the problems they relate to current technology – to stabilize it. In each category, the text alternates between interviewee narratives, and a discussion of the implications of their views. In order to illuminate possible connections between various actors, their views will be presented in an order primarily corresponding with shared views on the given subject, and their places in pre-defined social groups are subsequently discussed and assessed based on such similarities and differences.

5.1 *Setting the scene*

Seeking to create a rough framework for the analysis, the first part of the social mapping process is concerned with investigating what interviewees understand to be the nature of the current music market. Respondents provide reflections on what they hold to be true in terms of central problems and actors surrounding recorded music, and on the main conflict portrayed by existing literature – between the music industry and music consumers.

5.1.1 Realism and idealism – various takes on the music market malady

In order to attain a basic understanding of the various perceptions of the market present among actors, informants are initially asked the simple question: what is the current situation in the music market? The answers show a multiplicity of opinions.

The situation is that there is a lot going on [...] within something that may look like a paradigm shift. Which is first and foremost concerned with new formats and new forms of distribution and distribution channels. [...] The business hasn't found out how to relate to new technology, new opportunities; new channels. At least in the media, there has been a relatively panicked mood surrounding piracy and illegal downloading.

- Espen Lauritzen, Platekompaniet

A representative of Norway's largest CD retailer, Platekompaniet, Espen Lauritzen paints a rather dramatic image of the modern Norwegian music industry. But among the selection of representatives from relevant parties in the music market, no one disagrees that there are drastic changes at play. Daily manager Erik Brataas at digital music provider and copyrights administrator Phonofile portrays an even more sinister scenario. Describing the situation as 'very dark', he states that the decline in physical record sales is not even remotely compensated by digital ones. Even if a digital revolution is in the making, and will eventually generate highly profitable markets, the immediate consequences for actors in the current market are dire, he warns.

The impression of a radically changing market for music is well in tune with that provided by recent inquiries made into music sales. Technology and market research companies such as Forrester Research²⁸ and industry representatives such as IFPI have addressed plummeting CD sales alongside a growing market for digital music. While informants agree that the market is currently undergoing changes, there is however little consensus on the nature and result of these alterations, as the following pages demonstrate.

²⁸ <http://www.forrester.com/ER/Press/Release/0,1769,1200,00.html>

Number crunching – industry actors quoting numbers

A perceived mismatch between digital sales growth and physical sales decline is common among music industry representatives. The year 2000 marks the beginning of a downwards trend for many. Representatives of EMI, IFPI, ArtsPages, and FONO all express similar concerns with the digital market's inability to make up for losses in physical sales. But the numerical foundations for such a claim vary somewhat between them. IFPI's Marte Thorsby calculates a 10% annual decrease in music sales when taking digital sales into account, and estimates a rough 35% growth in the digital market from 2007 to 2008. Jarle Savio of EMI refers to Forrester Research in assuming that the physical market will shrink by 80% by 2014. He assumes digital products hold a 12-13% share of the total music market, a share which will rise to about 40% over the next five years (and 15-25-year-olds held 90% of the market 10-15 years ago, now approximately 10%). He also quotes numbers that claim a 7% decrease in illegal downloading domestically from 2007 to 2008. Dagfinn Sætra of ArtsPages operates with an estimate of 10-12% of total sales being digital – relatively close to EMI's estimates – but notes that Norwegian numbers may be skewed, due to the increasing amount of sales incurring through international channels. He also establishes a plummet of CD sales to about half compared to 2000 numbers; from around one billion Norwegian Kroner to half a billion in 2008. Chairman of FONO Larry Bringsjord estimates a 40% loss in physical unit sales by early 2009.

From these quotations it becomes clear that the estimates of record sales, their demise, and the simultaneous growth of a digital market are not alike among actors – though variations are of limited magnitude. Moreover, they illustrate the range of variables available to decision makers when needed to consider the developments in the music market; should one emphasize record sales, digital sales, or potential links between the two? Fluctuations in file sharing? Age segmentation? International or domestic numbers? Such concerns come in

addition to the apparent ambiguity of factual sources. Variations are not only apparent among industry actors' perspectives and between numbers, though: more fundamental differences emerge between actors.

Realism and idealism – variations prevail

In addition to decreased record sales, FONO's Larry Bringsjord notes a change in sales arenas, from specialized record stores to gas stations and wholesale retailers, in addition to a slowly growing digital market; an observation which is shared by DagensIT's Jonas Bakken. The decline in record sales also brings light to new sources of revenue, Bringsjord goes on:

What used to be secondary products have perhaps become primary products; I'm thinking selling to commercials, selling to movies and TV shows, selling to Sing Star, Guitar Hero²⁹ – games; we've focused more on all other kinds of sales. [...] And on an important source of income in a market which is signified by stooping sales.

- Larry Bringsjord, FONO

Smaller music companies are less taken with numbers than the largest actors, but often notice similar developments. Kristian Kallevik of independent record vendor and record label Tiger uses the term 'fundamentally unstable' about the market situation. He feels the insecurity of those employed in the record industry. The optimism displayed by many businesses does not reflect reality, he claims:

[...] Everyone holds their flag high and thumbs up until they close down, or change their business. But I think there are many who are looking around for something else to do, or use as supplements [...] The music business is perceived as very insecure.

- Kristian Kallevik, Tiger Records

²⁹ Popular music-based TV games.

Rune Grammofon's Rune Krisoffersen believes a majority of the populous agrees that the market for physical products is declining, and notes that the Norwegian market seems to follow international trends in this regard. Erik Brataas of Phonofile on the other hand reflects that the Norwegian market seems to have coped better with falling sales than have many others; pointing out that the number of foreclosures and bankruptcies has been low. But also Brataas notes that there seems to be uneasiness connected with the music business in general, and concludes that the key to make digital sales sufficiently profitable has yet to be located.

Thomas Müller of Nordic Records makes an example of the problems major pop acts have encountered due to file sharing. To illustrate, he explains how R&B singer Beyoncé, as a former member of pop trio Destiny's Child, sells dramatically fewer solo records today than did the trio in the nineties, despite her continuing popularity. Among ten- to twenty-year-olds, Müller claims, there is a significant decline in sales of large pop and related genre acts, compared to the market of five years ago. Artists who appeal to a more mature audience, such as Norwegian singer and composer Bjørn Eidsvåg, may however still experience high physical sales volumes, simply because their target audiences do not download music illegally, Müller reflects.

KRIPOS' Eirik Trønnes Hansen expresses sentiments similar to Müller's, but stresses that there are disputes over how to interpret recent developments. Still, he observes, the general sales trend has been downwards-pointing since around the year 2000, while file sharing has increased in volume.

Some claim file sharing is a form of advertising, and that people buy anyway. But if one compares these two trends over time, a long-term trend seems to emerge; that the sale of music is declining, while illegal file sharing increases. [...] There seems to be a connection.

- Eirik Trønnes Hansen, KRIPOS

The representatives of interest organizations FriBit and Elektronisk Forpost Norge (EFN) both approach the market situation in a manner different from other informants, rejecting a strictly economics-oriented take on file sharing for the benefit of one assessing its consequences in more rule-utilitarian³⁰ terms. While recognizing a conflict of interest between file sharers and economically invested actors, FriBit's Sverre-Arne Dragly lays much of the responsibility for such conditions on the music industry itself. Whereas users are embracing the advances in technology, he feels, the major music corporations still see such progress as an evil. Dragly recognizes that this 'evil' may well be the actual market now – suggesting that file sharing technology is so far advanced that it is by now an intrinsic part of the market. The largest music corporations, he goes on, have so far been the actors most reluctant to change. Though recognizing the industry's current economic calamities as a problem, Dragly believes the situation is faceted by several parallel developments; from steps to embrace the on-line market (for example through iTunes); via renewed conflict (for example through copy control technology and DRM); to entirely novel business models among smaller labels and actors, in which free music is central. EFN's Thomas Gramstad also brings up business models based on free music. He also discredits the concept of Digital Rights Management completely, naming it a case of shooting oneself in the foot for the music industry.

Summing up

There are clear differences between the factors on which various actors emphasize when describing conditions in the music market. Informants' views are coloured by their relative position in the market; while opinions are in some places overlapping, there is a general trend to be observed in the economics and numbers focus of large music companies and actors;

³⁰ Filing roughly under a definition similar to: "The rightness or wrongness of a particular action is a function of the correctness of the rule of which it is an instance" (Garner and Rosen 1967;70)

a less bombastic, yet uneasy mood among smaller actors; and the more idealistic agendas of interest organizations, sporting positions less condemning of file sharing. Though interviewees are united in the recognition of increasing file sharing and declining record sales, they stand separated in their evaluation of this development.

Who are the file sharers?

In order to establish some demographic framework in which actors identify music consumers engaged in general file sharing, informants were asked to specify the characteristics of file sharers as a group.

FONO representative Larry Bringsjord defines file sharers as ‘regular youth’.

Although strongly concentrated around a certain age demographic, file sharing is conducted by more or less everyone within that generation, he claims. The most sinister violations are also committed here; the *uploaders* of music are the worst of the lot, criminals, Bringsjord says – and they can be found within the same age range. Thomas Gramstad of EFN notes that there is a negative correlation between Internet use and age. (While, he admits, one should be careful of thinking such distinctions to be valid as a rule.) This notion is supported by both Sverre-Arne Dragly of FriBit and DagensIT representative Jonas Bakken, who both simply refer to file sharers as ‘most people’. Rune Grammofon proprietor Rune Kristoffersen also thinks file sharers are relatively young, but adds in that there is also a fraction of older users with strong computer skills. TONO’s Irina Tøien is more direct, claiming that file sharers are generally between the ages of fifteen and twenty-five. Other than in terms of age, she thinks, no demographic group stands out as more active file sharers than others. It may be easier and more relevant to look into who does *not* file share, Tøien argues. Marte Thorsby of IFPI refers to the same age segment as Tøien, specifying that within this group, between seventy-five and

eighty-five percent are file sharers; ArtsPages' Dagfinn Sætra extends Tøien's age group to twenty-eight years.

As can be seen from their responses, respondents' definitions of file sharers vary. A segmentation of age is common – typically placing file sharers between 15 and 30 years of age, or simply naming them 'young' – but some informants also warn against such frames of definition of file sharers. Equally noticeable is the absence of certain denominations; none of the interviewees reflect over file sharers' computer access, social background, or music consumption habits.

5.1.2 Relevant actors and social groups – the actors' own segmentation

Influential actors having been identified in existing literature, the informants are asked who *they* perceive to be relevant in the music market. This way, relevant actors define each other. This approach is in accord with the perception that power is native to those who make themselves heard (Star 2001), as discussed in the theoretical framework chapter; relevant parties are ones who succeed in being noticed in the market; and it follows Bijker's 'roll the snowball' methodology.

The most frequently highlighted group is the consumers of music. A majority of all informants bring up consumers as a central influence in the market. Elektronisk Forpost's representative explains:

It's obvious that when one has hundreds of millions of people involved in downloading, that becomes an influence [...] Even if it is unorganized and spread across the globe, there is such a weight to it that you simply cannot ignore it.

- Thomas Gramstad, EFN

Such views are common among respondents. The segmentation of users, and how they exercise this influence, are on the other hand disputed issues. While for example Larry Bringsjord of FONO calls attention to the role of ‘computer anarchists’, and users with a strong relationship to music, who actively contribute to the development of file sharing technology, KRIPOS’ Eirik Trønnes Hansen and Irina Tøien of TONO accentuate the impact of a broader population who, rather than function as engineers, simply choose to make use of illegal file sharing technology. It is a popular perception that despite users’ independent and unorganized behaviour, the sheer number of those engaging in such activities sums up to cause massive pressure on the developments of the music market. Bringsjord separates between the more ideologically founded users involved in creating new technology, and criminal wirepullers of economic motivations – two groups of which Bringsjord deems the former has redeeming features, while the latter is wholly condemnable. Rune Grammofon’s Rune Kristoffersen also segments producers and facilitators of file sharing technology. Both Kristoffersen and Bringsjord bring up file sharing site the Pirate Bay as a typical example of said technology producers.

Tiger Records’ Kristian Kallevik brings up both creators and users of technology as influential groups, and goes on to argue that even the ‘regular’ user takes part in shaping music technology, by customizing it to suit their desires:

[Users] have made their own folders, systems, playback opportunities [...] It is a paradox really, at our current level of sophistication in technology; the totalitarian attitude which exists among many of the rights holders and developers of technology, that ‘we should be in control, and everything must go through us’.

- Kristian Kallevik, Tiger Records

EMI's Jarle Savio, a representative of said rights holders, takes a slightly different approach; rather than focus on the influence of industry actors, he speaks the case of consumers controlling the direction of development in the music market. The current direction, he argues, has robbed the industry of much of its ability to control and predict developments in the market. Users are conscious and clear that they want music "in whatever *format* they desire, *when* they want it, and *where* they want it," Savio States

The focus on users however has a flipside; another widespread tendency amongst informants is to bring up more than one actor as significant influencers. With the exceptions of IFPI's representative, all interviewees who mention users as a significant party suggest at least one other actor or social group in the same context. Suggestions are numerous and diverse, but most frequently mentioned alongside users as empowered actors are major music corporations.

Feelings towards such corporations are not unanimous: while Espen Lauritzen of Platekompaniet expresses dismay over these companies' tendency to 'hold back' and slow down the developments in the music market, and EFN's Thomas Gramstad is critical of their alleged lobbying in U.S. politics³¹, FriBit representative Sverre-Arne Dragly and EMI's Jarle Savio are less condemning in their approaches. While consumers generally nourish little sympathy for the recorded music industry, Dragly argues, "...this is a slightly disturbing way of thinking, too – as it shows that many do not fully understand the work that lay behind producing a record". Savio, while highlighting the reduced influence of music companies, is alone in bringing up the relevance of music publishers, and to separate their role from that the record companies³². Also, while both labels and publishers have become more flexible towards new business model with time, Savio claims the same can not be said for rights organizations the likes of...

³¹ Gramstad mentions both the largest music and film industry actors. Such a claim runs parallel to the observations of interconnectedness between these industries.

³² See model 1, p. 21

...TONO and NCB³³ and such, who have been charging way too high fees, really, so that it has been impossible for new actors to enter the market. That is, there's no money in it. And there are no margins; because iTunes does not live off selling music. They live off selling doo-dads. Therefore, they are pricing at rock bottom. So there's no use competing with eight kroner per song, and eighty kroner per album – it's impossible.

- Jarle Savio, EMI

He feels that rights organizations have been hampering the development of viable solutions, but adds in that rash decisions are just as dangerous as slow-mindedness. Throwing money at a problem is not a solution, he says – on the contrary, it may make it difficult for less prosperous actors to make similar arrangements.

Platekompaniet's Espen Lauritzen, Phonofile's Erik Brataas, and Irina Tøien of TONO all bring up the media as a relevant group of actors. They also share a relatively sombre view of media coverage; Brataas and Tøien both suspect certain populist motives for what they perceive to be a support of file sharing in the media, while Lauritzen argues that media attention has largely been negative, focused on *"companies which persecute their customers; which exploit artists. And this clearly has a large influence on the general opinion, in terms of what people think of music and music sales."*

Telecom companies and Internet service providers (ISPs) also receive attention. ArtsPages' Dagfinn Sætra accuses telecom actors of negative aspirations towards contributing to a solution to the file sharing problem. Eirik Trønnes Hansen of KRIPOS believes Internet service providers are perhaps the actors closest to holding a position of control, and while sharing the view that ISPs seem unwilling to take sides in the file sharing debate, Trønnes finds this position quite understandable, under the claim that said companies do not wish to

³³ Nordic Copyright Bureau, an administrative body governing music releases in Nordic and Baltic countries. Headquarters are in Denmark. The bureau co-operates closely with TONO in Norway.

conflict with or alienate their customers. Phonofile's Erik Brataas also mentions telecom operators as an influence in the market.³⁴

Some other actors are mentioned only by individual informants: Svenn-Arne Dragly of FriBit is alone in bringing up the potential influence of music *artists*. In his mind, a sustainable solution for the digital market depends largely on an agreement between artists and users: "From what I've experienced [...] people are concerned that the *artist* should make the money; they don't care much about whether the record company gets the money it needs to produce and promote the record," Dragly says.

Phonofile's Erik Brataas mentions hardware and mobile phone producers as possibly influential actors, while Thomas Gramstad of Elektronisk Forpost calls attention to the emerging voice of the IT business. From the multiplicity of interviewee responses, some general tendencies towards the perception of power in the recorded music market can be observed.

A crude map – general tendencies in the actors' own segmentation

In several respects, interviewee responses concerning significant actors in the music market mirror the focal points of academic research. Users and major players in the recorded music industry are portrayed as central parties, and as counterparts in a struggle to affect recorded music's development. Two other groups; media, and telecom and Internet service providers, also obtain noticeable attention – though not at a level nearing the 'user' and 'record industry' groups. Of these, particularly media has been neglected in existing research.

An evident tendency among informants is to refer to *groups*, rather than individual companies and organizations. Such a perception is also in sync with existing literature with its

³⁴ ISPs and telecom companies are often closely related; amongst others, Norway's two largest telecom companies, Telenor and NetCom, also offer broadband services. See <https://netcom.no/mobiltbredband.html?linkid=meny> and <http://telenor.no/privat/internett/abonnement/vinterkampanje2.jsp?ICID=p-100104-forside-kampanje-winisp> for more information

emphasis on the organization of actors, rather than treating these as separate entities. It affirms the presence of social group dynamics in informants' perceptions of the market. These groups are often ascribed common attitudes towards digital music and file sharing.

There are a few exceptions from the inclination to group actors; some organizations or enterprises are brought forth as individually influential. Phonofile's Erik Brataas sees Apple as a particularly strong contender. This sentiment is shared by EMI's Jarle Savio, who sees iTunes'³⁵ pricing policy as a hindrance for other digital music stores.

Internet content providers (ArtsPages and Phonofile), and the law enforcement representative (KRIPOS) are the ones to emphasize the role of ISPs and/or telecom companies. Albeit perhaps unsurprising, this observation is interesting; while such limited attention is hardly by itself proof of telecom companies' and ISPs' relevance, it shows how actors at the forefront of the digital music industry pay more notice to the infrastructure of the digital market than others.

One group which has received some attention from researchers, but is noticeably absent in informants' initial discussion of the market, is government. Whether judicial, legislative or executive, such bodies are scarcely brought up; in fact, their only mention comes from Rune Kristoffersen of Rune Grammofon, noting that legislators and law enforcers have trouble keeping up with the technological developments in the digital market.

The user's choice – empowerment of consumers in digital music

It becomes clear from the informants' reactions that consumers of music have gained new ground in the market. While record companies are by some perceived to have lost relevance³⁶, it is a widespread belief that users are increasingly taking hold of the technological developments of digital music.

³⁵ The international market leader among digital music stores, and an Apple subsidiary.

³⁶ Rune Kristoffersen (Rune Grammofon), Sverre-Arne Dragly (FriBit), and Jarle Savio (EMI) perceive a level of disempowerment of the record industry.

EMI's Jarle Savio notes that one of the effects for this shifting balance of power is found in marketing. Users increasingly influence demand directly by organizing themselves: "The audience is also much more important now in terms of marketing and promotion, because they talk about music and write about music, blog about music, before the music is out there, before the first single is out," Savio explains. Informal communication, word-of-mouth, and consumer-run consumer journalism are in other words increasingly central to the diffusion of information in the music market in Savio's opinion.

More generally, several interviewees focus on the power granted consumers as the economic endpoint of music as a product. Such concerns are not without cause; the end value of any product or service depends on a market in which it is sold. Though a disputed claim, several scientific efforts have found a connection between increased file sharing and a decrease in CD sales (e.g. Liebowitz 2006; Peitz and Waelbroeck, 2006). As has been previously mentioned, file sharing presents users with an alternative outside the established economy, unprecedented in musical history – offering virtually costless access to a virtually endless selection of music, distributed directly to one's laptop within a short amount of time.

5.1.3 'Competing with free' – perceived problems in the digital market

The second stage of the social mapping process involves relating actors and groups to various problems which, in their perception, are related to the technological artefact in question. Informants were asked to identify the largest challenges facing the current music market. The answers reflect an array of angles and ideological idiosyncrasies.

Actors deeply enmeshed in the digital market are, relatively speaking, among the optimists. But even they see obstacles ahead. For Nordic Records' Thomas Müller, a main challenge is being noticed in a crowded market – increased availability leads to intensified competition for the spotlight, he argues. This applies both to artists, and to the album as a

format in competition with single tracks; the ease of purchasing digital singles elevates demand for overall quality in albums to make them desirable, he elaborates. Phonofile's Erik Brataas, while largely positive to the digitalization of music, is both professionally and personally opposed to illegal file sharing. In addition, he points to the threat of increased competition from other entertainment media. The current generation of children and youth experience a higher pressure on their time and funds than did their parents, Brataas says; and it spends more of both on other entertainment goods than on music. Dagfinn Sætra of ArtsPages is more bombastic, naming illegal file sharing the clearly largest problem in the music market. He speaks up against those who blame the industry's demise on slow reactions to the opportunities in the digital market – noting that the industry offered digital sales solutions as early as 1998-99. The failure of these on-line stores, Sætra argues, was largely caused by file sharing initiatives like Napster and mp3.com. Sætra illustrates “A lot of people told the record business that people do not cross at a red light, and do not make wrong turns, and do not drive too fast. But as it turns out, people do.” A climate of not enforcing copyright law, and the ‘dot.com collapse’ have further worsened the conditions for a sustainable digital market, he finishes.

Interestingly, these three informants, while all strongly involved in the digital market, display very different views on the challenges it is faced with. There is in other words little to suggest that involvement in digital music is significantly related to any shared opinions of the challenges it presents, other than a general optimism towards its future – which is somewhat to be expected, considering that the informants are willing to invest themselves professionally in the digital music market.

What opinions, then, are expressed in the physical end of the market – amongst the CD and record vendors and producers? Kristian Kallevik of Tiger Record Store (and the Tiger label) argues that the market's largest challenge is culturally based – it is about furthering and

representing a cultural heritage. The digitalization of music does not have very strong ambitions of representing music in this manner, he believes; there is a dominant mainstream orientation among its actors. “There are too few librarians,” Kallevik says, “- it’s either pirates or stock market people”. Platekompaniet’s Espen Lauritzen is on the other hand more concerned with the economics of the market. To him, most significant is arriving at a structure for digital distribution of music which works for users, record companies, vendors and artists. Such a structure will involve issues of formats, economics, distribution of profits, and several related themes, he argues, specifying that a main concern is the dominant position of iTunes in the digital market. The established price level for digital recorded music (largely set by iTunes, in Lauritzen’s opinion) necessitates changes both in the record companies’ pricing policy of digital music, and in international VAT legislation, he goes on. Legislative bodies have failed to take into account the globalized nature of the Internet, says Lauritzen – it is irrelevant where a company is located to a consumer of digital goods.

Among record labels, EMI’s Jarle Savio employs the phrase ‘competing with free’ to summarize central problems facing the music business. He also stresses that music is moving away from being a product and towards becoming a service³⁷; a development which, although not necessarily negative, he believes is challenging to comprehend and react upon.

One who partly opposes this notion, however, is Rune Kristoffersen of one-man label Rune Grammofon. Though recognizing the increasingly marginalized relevance of physical products in popular music (and particularly among the publications of major, multinational music corporations), Kristoffersen himself is set on a continued production of physical products, believing that a niche market exists for such goods. Elaborating and improving the unique characteristics of tangible products may improve their perceived value, he explains.

³⁷ For a detailed discussion on music as a product versus music as a service, read the segment “Product or service? The schizophrenia of digital music”, p. 25

While unanimity about the threats of file sharing is noticeably absent among music producers and sellers in the digital market, this impression is cemented by the opinions expressed by their peers dealing in physical formats. Although clearly significant, file sharing fails to dominate the discussion of the music market's largest challenges. The music producers' umbrella organizations are somewhat more concrete in their views:

IFPI's Marte Thorsby takes a clear stand against file sharing, and calls the situation a state of "total anarchy on the 'Net". An attitude that music is free has manifested itself among an entire generation, she argues, referring specifically to 15-25-year-olds³⁸. Thorsby then brings up the issue of government passiveness in the debate. In highlighting this, she is in tune with Larry Bringsjord at FONO, who believes a significant challenge lay in convincing politicians, both in Norway and the rest of Europe, of the viability of ownership of music. Neither politicians nor police follow up on the actual legislation on property, he claims, in terms of digital music. But, Bringsjord stresses; "challenge number one is always producing and making good music."

Alongside these two organizations and other critics of IPR law enforcement, Eirik Trønnes Hansen from KRIPOS also points out the police's challenge of prioritizing investigation of illegal file sharing activity. File sharing is in reality a mass misdemeanour, he says, noting that investigations will always be subject to limited capacity and resources, and stating that few file sharing cases have been subject to investigation. Investigating illegal file sharing is not necessarily simple, he explains, and adds on that file sharing crimes subject to litigation are often 'spin-off cases', where the illegal files are found in connection with some other investigation.

The interest organizations keep a more idealistic view of the challenges posed by the digital music market: FriBit's Sverre-Arne Dragly thinks what is needed is a more reflected

³⁸ Note that this demographic group is also referred to by Savio (EMI).

approach to the issues of digital music. The main challenge is to convince people that the debate is not an ‘either/or’ question, he says. File sharing is neither fantastic – something to defend for all its worth – nor evil incarnate, which must be vanquished, Dragly argues.

Thomas Gramstad of Elektronisk Forpost sides with the file sharing consumer, calling it unacceptable that millions of people are currently in effect criminals. Also, the trouble finding an overall solution based on standards is part of the problem, he goes on. This is a matter of some urgency, Gramstad believes; as file sharing technologies have been subject to persecution, they have become more robust. He supports his claim by proposing that encryption of files has become steadily more common, alongside ‘closed’ file sharing communities that are ever more difficult to survey. If such tendencies are allowed to develop, Gramstad fears, it will diminish the chances of creating functioning legal solutions. The file sharers may easily sink further underground, and out of reach, if they are criminalized, he argues.

In the media, Jonas Bakken of DagensIT agrees with Platekompaniet’s Lauritzen that the central issue is to find a business model which endorses their interests of involved parties. DRM technology has been an unfortunate detour in the process of finding solutions that users will embrace, he feels. Bakken also notes much uncertainty surrounding digital files; the lack of standardization of rights and features connected with various formats and publishers make users unsure of what they are buying. The illegal product is simply less problematic than its legitimate counterpart, he claims, bringing up both user rights and (Platekompaniet’s Espen Lauritzen’s) concerns with of international legislation as central themes. Although highly critical of some record industry actors’ alleged manipulation of sales numbers in order to exaggerate their losses, Bakken sums up, “it’s hard to compete with ‘steal whatever you like, for free’.”

5.1.4 A painful transition - discussion on perceived problems

In their assessment of recorded music's most pressing problems, the informants are highly homogenous in some respects, and differing wildly in others. Close to all interviewees agree that the largest challenges facing modern music lay in the digital market. This uniform emphasis on on-line market and distribution structures confirms digital music's position as a dominant arena for current controversy. Still, opinions of the *problems* related to digital technology are strictly divided. When asked to identify current challenges, actors are often coloured by their position in the market, though displaying a high degree of heterogeneity, even within pre-defined groups.

A significant tendency is reluctance among actors to bring up illegal file sharing as the largest challenge in the current music market. Illegal file sharing more seemingly assumes the position of an implicit symptom of ideological or systemic crisis in the digital sphere. Along these lines, a common response circles the theme of finding new business models for the digital market, an issue where file sharing certainly plays a part – but is only one of many variables. The desired manifestations of such a model, however, vary.

Still, some do bring illegal file sharing to the front of the line. EMI New Media Manager Jarle Savio's idiom of '*competing with free*' sums up these views; that the presence of file sharing provides consumers with a costless alternative to legal solutions which is difficult, or even impossible, to vie. The term itself, though, can be somewhat misleading; along the lines of the saying 'there's no such thing as a free lunch', costs always incur alongside the consumption of goods. There is an investment of time into searching, sorting and downloading files through the Internet, which may even exceed the time spent finding music in record stores and other venues. Any downloading activity also relies on the availability of an Internet connection, which (with the exceptions of certain public domains and workplaces) entails some subscription costs; and attaining and using digital music files

requires computer hardware and software, and sometimes additional playback equipment (Marksten 2005; 9). Still, costs related to illegally file shared music, as compared with those of its legally traded counterpart, are marginal.

Rune ‘Grammofon’ Kristoffersen and Jonas Bakken of DagensIT express pessimism about the future of the CD format. This view plays in with the finding of McCourt (2005) that the importance of physicality has been degraded alongside the evolution of physical formats since the heyday of the vinyl record. “Each format [...] has reduced the listener’s physical interaction with music”, McCourt argues, “which allows music to acquire an increasingly ambient status” (ibid; 249). But where McCourt makes the case for abandoning the CD as newer and even more ambient formats become available, Kristoffersen finds grounds for renewed investment in the compact disc, emphasizing value-enhancing elements unique to physical formats.

The views referred above highlight two general tendencies; the complexity of digital music as a technological artefact, and the critically diminished position of the CD as a format for recorded music. Addressing the latter issue first: The criticism towards compact discs underlines not only a change from physical to digital formats, but a deep-seated distrust of its capabilities in sustaining a significant position among the physical formats. Bakken sums up the scepticism:

The CD is not a particularly fun format. It was fun when it came out, because we didn’t know any better, but it satisfies neither optimal listening quality, for those who care about that, nor optimal availability, for those who care about *that*.

- Jonas Bakken, DagensIT

The topical absence of physical formats in the general discussion of challenges ahead certainly does not improve the CD’s prospects – the future seems solidly grounded in the

digital realm in informant's minds. To the extent that physical formats retain relevance, Bakken brings up the vinyl record as a more likely candidate than the CD.

In their relation to digital music technology, discerning differences between and finding similarities within the pre-defined groups is difficult. It also becomes apparent that many informants relate more than one problem to the technology's current manifestations; reflecting both the variety of technologies connected with digital music, and the multifaceted nature of the debate. The informants' concerns span from the purely econometric to the ideological.

A few tendencies emerge within the social groups in this first segment of the interviews. Firstly, representatives of the large umbrella organizations for recorded music producers, FONO and TONO, both accentuate legal issues as major challenges. Albeit not alone in this, the organizations seem to make the connection between law enforcement and policy, seizing the opportunity to criticize policy makers. Secondly, the ideological organizations FriBit and EFN take, not surprisingly, a more ideological approach. Their ideologies however differ.

5.1.5 Investigating the industry/user taxonomy

So far, users and record industry have emerged as the most prominent social groups among informants, as it does in academic research. Simultaneously, perceptions of some conflicting ideals between industry actors – or *some* industry actors – and users – or *some* users – present themselves in the interviews. Whether such a view has consensus among informants is a subject of interest; do users and record industry stand as opposites in their take on the nature

of music? Informants were asked whether they see a conflict in values and opinions expressed by users and music industry³⁹, and, if such a conflict exists, to describe its manifestations.

All informants reflect some recognition of a conflict between users and music industry. The most common description of it is one of differing perceptions of the nature and characteristics of music. Tiger's Kristian Kallevik identifies conflicting perceptions of value, price, and ownership of music, describing a 'chasm' between rights holders and consumers. Jonas Bakken from DagensIT argues that while industry actors are primarily concerned with music's economic characteristics, many users are only too happy to embrace the concept of free music. The lack of sufficient legal alternatives to the file sharing services has in his opinion spurred the risk for a clash of attitudes. TONO's Irina Tøien also argues that commercial demands which exist within the industry are not reflected among many users, and believes this is a constant – an innate conflict in the music market. Espen Lauritzen of Platekompaniet blames the implementation of copy blocking technology in legal formats and the litigation efforts undertaken by the record industry against its own customers for an existing conflict. Rune Grammofon's Rune Kristoffersen also holds copy blocking responsible for much of the situation, alongside a general slowness in adapting to a digital market on the large music corporations' side. IFPI's Marte Thorsby shares the sentiment of differing perceptions, but is less ready to distribute blame:

[There is] a large gap in values from the *creators* of music, who have invested both significant amounts of time and money into it; while the users *want* the music, but are actually unwilling to pay for it. That's not compatible.

- Marte Thorsby, IFPI

³⁹ The term "music industry" was used, as not to narrow the discussion to cover only producers of physical formats.

Others have a clear segmentation of user and producer groups in mind when speaking of a conflict. Phonofile's Erik Brataas defines it as one between extremes in the market. These extremes are corporate music on one side, with their litigation of file sharers, and the self-proclaimed pirates on the other, showing communist-like tendencies, he says. The extremes make all the noise in the debate, Brataas argues; and they portray a false image of some profound crisis of trust between those who want to publish music and those who want to hear it.

Elektronisk Forpost Norge, for example, and others who have spoken the case of illegal file sharing, are just as uncompromising as IFPI and RIAA⁴⁰ and their likes have been in the USA, and there is not much hope of uniting these two interests. Doing so isn't interesting. But they control much of the debate.

- Erik Brataas, Phonofile

In reality, he believes, the majority in both camps have a relatively reflected take on the situation.

Named a representative of such 'extremes', EFN's Thomas Gramstad agrees with the view that the conflict is at its core about dissimilar conceptions. Like Brataas and Lauritzen, he places industry actors at the heart of the disagreement, pointing to conservative behaviour among large corporations. These sport an unhealthy focus on physical products which keeps costs and prices unnecessarily high, Gramstad thinks – as opposed to in a scenario where digital distribution is dominant. In the struggle between industry and users, Sverre Arne Dragly of FriBit describes a forefront populated by a minority of users with in-depth knowledge of and strong ties to technology. These are the ones who in reality publish the content in file sharing networks, he claims; others can rarely be bothered to undertake the

⁴⁰ The Recording Industry Association of America. <http://www.riaa.com/aboutus.php>

work involved in such publishing. Such ‘techno enthusiasts’, as he dubs them, are probably also those who early on took the ideological stance that digital copies are void of value.

The arguments forwarded by the music business concerning its losses due to file sharing are a very good example of the fact that [the music business] sports an entirely different apprehension of value than what the file sharing enthusiasts have. And there is probably a need for approaches from both camps, to start examining why one has these different perceptions of value, and to start respecting each other for these disparate opinions. [...] Without trying to force people to agree on what’s worth paying for, and what’s not.

- Sverre-Arne Dragly, FriBit

Eirik Trønnes Hansen of KRIPOS comments that the ‘users’ segment is highly heterogeneous, and that users’ values can hardly be defined as unison. While younger generations grow up in an environment where file sharing is common, he cannot imagine his own parents to be eager file sharers – even if they are eager music listeners. Also the file sharing activity of active users varies; while some are hardly aware of their participation in uploading of content on file sharing networks, a group of die-hard users are responsible for large amounts of the traffic. Using examples from actual police investigations, Hansen emphasizes a small amount of extremely active file sharers, storing enormous amounts of digital content on their computers.

EMI representative Jarle Savio separates users using similar terms. He recognizes a mismatch between industry and users, but goes on to argue that this does not apply to all users, not even a majority: Most music consumers sport an unproblematic relationship to the music business, he believes. While these understand the economic features of music, another segment of users fronts a more romantic view of music, Savio claims, in which artistry is alpha and omega, and making money a negative. Nordic Records’ Thomas Müller is of a somewhat different opinion, believing that users have an erroneous understanding of how

record companies work and operate. The stereotypical greedy company does exist, but not in the Norwegian market, he says.

A popular Norwegian artist sells 100,000 copies, some may reach 200,000; while in the States, you're talking about entirely different numbers – and then there's more cynicism, more money, and [companies] operate in a wholly different manner.

- Thomas Müller, Nordic Records

Dagfinn Sætra of ArtsPages thinks the conflict is between the industry and users who refuse to pay for its produce. Some cross the border into premeditated criminal acts – such as those who run the Pirate Bay, he argues. These are the 'ideologues', Sætra says, who defend free music, but simultaneously make their own profits off the illegal activity.

While the presence of a user-industry conflict remains undisputed, the image of two social groups of internal harmony, members unified by shared values and opinions, fades. Several informants find it necessary to separate users into categories of differing relationships to music industry and music as a technological artefact. While there is a lesser tendency to segment the music industry in such a manner, the heterogeneous responses its representatives provide suggest a multiplicity of attitudes also here.

The Lost Generation (and other troublesome demographics)

FONO's Larry Bringsjord defines a 'lost generation' of music consumers, aged between fourteen and twenty-five, accustomed to free music, and lost to all economic purposes unless something is done to change the situation. Himself having experienced the gap between these youths and the record business, Bringsjord explains: "I sit with youth whom I know personally, and who I'm even related to – and to explain to them that "this simply isn't allowed"... it's more or less impossible to get through to them." While both older and

younger generations lack this conflict with the industry, “- but that generation is pretty much blown away,” Bringsjord finishes.

This perception that young consumers have the most troublesome relationship with music industry harmonizes with the view shared by many industry actors suggesting a demographic of file sharers aged between early teens and late twenties. While such beliefs are hardly without foundation – amongst others, Marksten refers to numbers showing how teenagers is the age demographic most actively involved in music listening, alongside being high-frequency Internet users (2005; 7) – it is difficult to find scientific results to verify a correlation between specific age groups and file sharing. As one of few sources, Hietanen and Räsänen (2007) do find a significant correlation between age and file sharing among Finnish Internet users, showing 18-24-year-olds to be the most active (and those under 18 the second most active) file sharers – though admitting the limited validity of these findings in the general populous.

A conflict of values is not limited to a gap between users and industry, argues representative of TONO, Irina Tøien. It also exists between industry actors, she believes: while some are primarily focused on creating quality content, others have their focus on profits. The latter of these groups will be weakened by the crisis in the music market; a process of ‘desirable cleansing’, she feels, arguing that economic motives are a bad match with music, depriving other actors of their fair share of profits. Like Jonas Bakken of DagensIT, she describes a transition for the industry, and finds it a welcome one, in which recording companies are forced to distribute profits differently and more fairly. Jarle Savio of EMI on the other hand opposes anti-economic sentiments towards the industry, pointing out that music has been economically motivated since Mozart’s time. KRIPOS’ Eirik Trønnes Hansen also goes some way to defend the music industry’s economic interests:

[...] the record companies are, you may say, venture capitalists, or investors; they've put down a lot of money in advance. And if they did not, every artist would release on their own label. And why don't they? – Because then they'd have to take up a loan to pay for studio rent, and then they'd have problems producing the income to pay for food and gas during the time they're in the studio.

- Eirik Trønnes Hansen, KRIPOS

Relations are in other words far from simple between the industry actors and users, nor among them. Pre-defined groups are no different; but a discernable agreement can be found within the group of large industry actors EMI, FONO and IFPI.

The extent of a 'conflict of values' is perceived differently by various parties – from one broadly and principally founded, to one between factions. These are two general modes of explanation for this conflict which stand out: one emphasizing different understandings of the 'nature' of music by users and industry; the other highlighting various types of demographic segment in which the opposition against the record industry is to be found. Specific views on the matter do not emerge as coherent within any specific group of actors, but rather seem relatively random.

Liquid music – ideology in the digital era

Platekompaniet's Espen Lauritzen thinks that the gap between users and industry has lessened: the conflict is about the product the industry has offered, he argues.

[...] the only thing that has been available for purchase, not including iTunes, has been DRM protected WMA⁴¹ files. And that's produced a conflict, right – though we haven't had a problem with it in Norway – (but) particularly in the United States, there has been some legal persecution of people who download music. [...] [These circumstances] have contributed to giving the business a bad, conservative

⁴¹ Windows Media Audio, a music file format similar to the mp3.

and laggard reputation. And rightly so. But these things seem to perhaps be headed for a solution. And I don't think most people actually think music should be free. That it should be some universal prerogative, equal to having water in the tap.

- Espen Lauritzen, Platekompaniet

Knowingly or not, Lauritzen here takes a stand against an approach manifested e.g. in Kusek and Leonhard's (2005) vision of '*music like water*': that recorded music could be and should be free in the digital era, and available to everyone – like 'water in the tap'. Other prominent names in music and business literature sport similar views, like Mark Katz (2004) and Chris Anderson (2009); arguing for the innate social value of file sharing and a paradigmatic shift towards free music services, respectively. In his interview, EFN's Thomas Gramstad promotes the legality of free music through file sharing: in the information age, information should be available to everyone, he elaborates.

Lauritzen's statement shows that this logic is not obvious for everyone. His view is shared by most informants with economic investments in recorded music production or trade, and illustrates a fundamental gap between ideological standpoints. These parties – the supporters of free music, and the advocates of music as a traded good, are diametrically opposite forces on the technology. While the former sees file sharing through peer-to-peer distribution and creative commons as an optimal tool for *their* vision of music availability, the latter group fights for the opportunity to maintain music as a product. Typically, the strongest voices here speak on the behalf of users (free music), and industry (music as a product).

The struggle over recorded music technology is thus, at least partially, founded on fundamentally differing conceptions of what music should be. It is also observed, however, that this opposition is not perceived to be representative of the market as a whole; many informants highlight a blossoming heterogeneity of opinions and attitudes among themselves and others. The complexity of the recorded music market is not embodied in a simple

taxonomy, not between users and industry nor other actors. In order to understand the dynamics that affect its technology, insight is required also into the finer distinctions of relevant actors' attitudes towards recorded music technology, and towards each other. The following chapter investigates in more detail how informants look at each other, as they are presented as the social groups deduced from academia.

5.2 *How does it feel? Going in-depth on music and its pre-determined influencers*

The third step towards an understanding of the social shaping of music strives to achieve a thorough understanding of its concerned parties. To this end, informants were asked to share their feelings towards the previously established *relevant social groups*. The interviewees were also requested to formulate their attitudes towards the general music market situation as they perceive it, and specifically to reflect their opinions on file sharers and the general situation's effect on the artist. As an extension of their general description of the music market, informants were asked to elaborate their personal feelings on its current state: what do they actually *think* about the way things are? From their responses, a clearer image emerges of their agendas, their relations to one another, and to the technological artefact of digital music.

Feel Good, inc. – general optimism towards the general market

I think a lot will happen over the next five years – I think things will change radically. And it really feels like a privilege, getting to sit right in the middle of it, and play a part. It's an exciting time.

- Kristian Kallevik, Tiger Records.

Despite their sometimes gloomy descriptions of the economic conditions of the music industry, there is a noticeable amount of optimism present among its actors. Feelings are mixed, Tiger Records' Kristian Kallevik admits, but he remains generally optimistic. He is supported by Nordic Records' Thomas Müller, who believes vast changes will transpire in the years to come. The nature of these changes, however, he finds it difficult to predict. Also Espen Lauritzen, representative for the Platemakern record store chain, looks brightly at the future: He observes that the market for music is larger than ever before, and argues that illegal file sharing must receive a fair part of the credit for its expansion.

[Illegal file sharing] has led to people using more music; hearing, discovering more music, and spending more time on music. And that, I feel, is an enormous opportunity which the business must be able to exploit. But to manage that, [...] one must offer a product which is better than what has existed up until now.

- Espen Lauritzen, Platemakern

EMI's Jarle Savio also believes the worst times are past for the music industry. Rather than credit file sharing for expanding the market, however, he feels that the record industry must take some of the blame for the demise in profits, due to its saturating the CD market in the nineties. At the same time, he believes, predicting the recent developments in the music

market has been difficult. He refers to file sharing and its rapid diffusion as a ‘Black Swan’⁴², a term ascribed to inventions that are unforeseen, and that radically change the premises of its surroundings.

While a mood of blended optimism and insecurity dominate responses on the general conditions in the music market, actors are often of strong opinions when asked to assess each other’s position in it, as will be seen in the following chapter.

5.2.2 Passing judgement over pre-defined groups

In a closer scrutiny of their views on the roles and nature of relevant social groups, actors give an account of their attitudes towards each group. Their answers lay the foundation for a multifaceted image of the relations between various parties in the music market, and aids in investigating possible links between actors’ perceptions of the current market, and the findings of existing research. This chapter is divided in accordance with the literature’s segmentation of relevant social groups: starting with music consumers and file sharers; via record companies; media and their coverage of digital music and file sharing topics; and closing with an assessment of music artists’ conditions in the current market, followed by a short summary. Each segment includes a discussion of central topics brought up by informants, linking these to relevant data and studies where applicable.

5.2.2.a Consumers of digital music, and file sharers

Previously having firmly established music consumers as leading influencers in the music market, informants are asked to elaborate on their relationship to them; specifically, their attitudes towards digital music consumers and file sharers, respectively.

⁴² See Taleb (2007) for a more detailed description of Black Swans.

Neither music consumers nor file sharers receive collective condemnation by any group. EMI representative Jarle Savio is clear in his view: consumers must be allowed to decide precisely what they want and when they want it. Such sentiments are shared by many informants; FONO's Larry Bringsjord notes that formats are constantly evolving (also into the digital realm). In addition, he is clear that one must separate not only between digital music consumers and file sharers, but between the file sharers themselves: one must remember that certain forms of file sharing are legal. Also here, similar views on are shared by Savio:

There has been a lot of focus on streaming services as the business' salvation [...] I think that's a truth with moderations. Streaming is a *part* of its salvation – [but] it doesn't suit everyone. Some will still fill their hard drives with music, and some will want vinyl [records].

- Jarle Savio, EMI

Striking among several respondents is a will to explain file sharing wholly or partially as a consequence of lacking or insufficient legal digital music services. Phonofile representative Erik Brataas feels 'a bit sorry' for the users of legal services in their current state; Nordic Records' Thomas Müller calls for appropriately priced digital services. Sverre-Arne Dragly of FriBit also advocates that the current market is not adept to the needs of its users. A central question, he goes on, is whether (and how) to create solutions to suit everyone, or just some – separating between users who are willing to pay premium price for music, and those who resist paying at all. File sharers are among the biggest spenders on cultural goods and services, Dragly argues, deducing what he finds an interesting observation: that file sharers are culture lovers, rather than simple freeloaders, and thus not opposed to spending money on music, given that pay-services are sufficiently well-made.

Dragly is not alone in reaching a hand out to file sharers. They are doing something very natural, says EFN's Thomas Gramstad; the sharing of culture is a social act which must

be supported rather than opposed. File sharers are perhaps not the criminals they are portrayed to be by certain industry actors, muses Jonas Bakken of DagensIT, though adding that the arguments used to justify their activity often seem more like excuses than heartfelt reasons. Tiger's Kristian Kallevik thinks file sharers generally sport a strong interest in music. He believes they are largely driven by social motivations within the file sharing community, a view supported KRIPOS' Eirik Trønnes Hansen, who returns to his previous discussion on psychological incentives such as competitiveness and collecting as possible explanatory elements in extensive file sharing behaviour.

Others are far less forgiving of file sharers. "Sharpen up", says TONO's Irina Tøien, "– understand the significance of your actions, also in positive terms – that you're contributing to the production of music if you purchase music." Conversely, she claims, file sharing undermines the production of new music – especially within the genres that are most frequently file shared. Both Phonofile's Erik Brataas and Espen Lauritzen of Platekompaniet describe file sharers as a group with anarchistic inclinations. Artspages representative Dagfinn Sætra has little sympathy for file sharers' arguments:

They claim that [CDs are] too expensive, though they don't hesitate to spend 300 kroner to see a concert; and CD prices haven't been raised in the last ten years! [...] File sharers have numerous excuses to do what they do – just as one had excuses at age fifteen, to do things that couldn't stand one's parents' searchlight. So file sharers, they think mainly about themselves.

- Dagfinn Sætra, ArtsPages

The opposition between costly CDs and 'free' digital music is faulty, in Sætra's mind, as file sharing requires both expensive computer equipment and a broadband Internet subscription. FONO chairman Larry Bringsjord thinks file sharers' behaviour witnesses a lack of respect for those who create music.

As illustrated by these responses, there is a wide span of opinions towards digital music consumers and file sharers within the market, ranging from blatant disapproval to warm embrace. While different views are often jumbled between members of social groups, there are some discernable patterns.

Sympathy for the Devil?

The most widely shared tendency among actors is a level of sympathy for users of digital music. As in the discussion of problems related to current technology, some deem available legal solutions insufficient; others have a soft spot for file sharing out of ideological motivations. In sum, these statements show how neither social group is wholly condemning of file sharing.

Least critical of file sharing are, as in previous discussions, interest groups Elektronisk Forpost Norge and FriBit (albeit EFN stands out as clearly more liberal). But also newspaper Dagens Næringsliv's representative and even some music industry representatives see redeeming features in file sharers. Harsh criticism is not foreign to the market either, though: particularly industry organizations and digital content providers seem negative of file sharing behaviour.

Much less frequent are attempts to segment different types of file sharing or digital music consumers. Phonofile's Erik Brataas is alone in separating legal and illegal file sharing. Some distinguish different types of music consumers – an approach which is discussed more closely in the following paragraphs.

A collecting society?

KRIPOS' Trønnes Hansen brings up the subject of *collecting behaviour* as a possible driving force for some file sharing. This relates to arguments presented by Tellis et al. (2002) and

McCourt (2005) (discussed in chapter 2.3) concerning the social aspects of music consumption. Hansen notes that possessing the music may sometimes be of more importance to file sharers than actually listening to it. If such ideas are held to be true, they would imply that there not only exist subjective assessments of price and risk behind consumers' determination to share music, but that social interests also play a part. Though not a central theme in this study, the presence of strong social motivations for file sharing would present some interesting consequences; firstly, the case for positive network externalities from file sharing might be strengthened, and thus raise its potential value for the music industry. Secondly, measures directed at offering legal free-of-charge solutions may have a lesser effect than if social motivations were not present. Such arguments are indirectly supported by e.g. a 2009 survey from Norstat, quoting that only 4% of the population names a lack of sufficient legal services as explanatory of file sharing⁴³.

5.2.2.b Record companies

Our second pre-determined social group has, like consumers, been emphasized as strongly influential both by current literature and informants. Many interviewees are however eager to distinguish between them: most commonly, a bifurcation into large, multinational enterprises and smaller, independent labels is accentuated. Some, like Rune Grammofon manager Rune Kristoffersen and Tiger's Kristian Kallevik, identify a separation of esthetical and artistic values between these groups. While Big Music has cultivated a 'trash culture' (Kallevik) of 'flat' pop music (Kristoffersen), independent labels have maintained focus on musical and production qualities, they believe. Conditions are even worse in Norway than elsewhere, Kallevik goes on, with an audience which neither respects nor trusts the industry. Its counterpart, he says, focusing on quality and aesthetics, is labels like Rune Grammofon.

⁴³ <http://www.dagbladet.no/2009/04/15/kultur/fildeling/tekno/gramart/5756175/>

Others separate companies' ability to implement new business structures or technology – which is particularly strong among small, independent labels, EFN representative Thomas Gramstad specifies (though noting that ultra-conservative actors exist also among small companies). Major corporations are far less flexible, he goes on, in harmony with the wording of FriBit spokesman Sverre-Arne Dragly. Gramstad and Dragly both voice an understanding of major music enterprises' unwillingness to change, but nourish little sympathy for it. New companies will take the place of those who reject necessary change, Gramstad states. Smaller companies have shown stronger incentives for risk-taking in a new market, and have profited accordingly, Dragly says.

Record companies must start acting like *music* companies, both EMI's Jarle Savio and FONO's Larry Bringsjord think, in recognition of the new multi-format nature of music. Savio agrees that independent labels have been quicker to adjust to this new reality, but simultaneously fears that small companies may also suffer the most under a regime of reduced profits; they lack the major companies' safety net of a large back catalogue which will continue to generate income in coming years. IFPI spokeswoman Marte Thorsby shares the notion that the industry would have benefited from quicker action in the digital market, she is clear that such efforts would not have prevented the emergence of file sharing services. Her argument is lent some support by Erik Brataas, who comments that Phonofile's digital archive MusikkOnline was launched as early as 2002, to provide an example of early moves within the business towards the digital market. He believes that more critical errors were made by industry actors in the handling of Digital Rights Management.

DagensIT representative Jonas Bakken believes that conservativeness on the part of the record industry can be linked to the threatening prospect of diminishing power over distribution in the digital market. While Bakken maintains that the industry will still hold a dominant position in the market, EFN's Thomas Gramstad believes a process of power

transfer is already discernable. The industry is losing control over large segments within distribution activities and creative processes, while artists are gaining a stronger position in such matters, Gramstad says.

ArtsPages spokesman Dagfinn Sætra calls the Norwegian record industry world leading in producing and distributing locally signed music – the problem, he argues, has been insufficient portals for digital distribution and sales. Any economic benefits from this market have been hard to discern, he continues – but the situation is improving. Platekompaniet's Espen Lauritzen complains that executive decisions on digital business have rested with corporate headquarters until recently, and the disempowerment of Norwegian offices made communication on digital accounts difficult. He too, though, sees a brightening development, following a professionalization of relations. Manager of Nordic Records Thomas Müller has great confidence in the future of music.

Summing up, while in previous responses informants have tended to display a highly varied and multi-faceted image of digital music and its Norwegian market, when asked about their attitudes towards record companies some groups seem to emerge, both in terms of types of companies and the roles they are to fill in the current music market.

Small and large: a new segmentation within the industry

Some segmentation of record companies is common in the responses: specifically, between multinational corporations and SMEs. The 'Big Four' takes much of the heavy fire towards the industry: smaller companies, in particular those who fly the 'independent' flag, gain more sympathy. It is a common belief that while independent labels and their peers are more responsive to changes in the market, the multinationals are laggards, even reactionary. 'Big music' is however not one-sidedly made the villain: for example, record label Rune Grammofon proprietor Rune Kristoffersen points out that turning an entire business around,

including its multi-national spearheads, is a demanding process, and must necessarily take time.

These responses challenge the tendency in existing research to refer to the record industry as a homogeneous group: there are clear differences in how actors perceive large, multinational corporations and small- and medium-sized enterprises, both in terms of their adaptability to the digital market, and their attitudes towards digital music and file sharing. This is of course not evidence that such a taxonomy is correct; the interviewees may have a wrongful perception of the market. Looking at the responses given on opinions about digital music and file sharing, however, industry organizations representing major corporations (alongside digital content providers) seem to be particularly negative of file sharing, giving credence to the notion of some difference of attitudes.

The filtering function? – record companies' role in a digital environment

Rune Kristoffersen of Rune Grammofon defers any argument that the record industry is superfluous in today's market. It has a clear function as a *filter*, he argues, through which musical quality is assessed before it is released on the market. He finds it difficult to see how consumers would be able to orient themselves without such filters,

I get demos from around the world, and 95% of it I can't fathom why people have bothered sending me at all. Because it's so *out there* to think that one could get a record released here [...] the understanding of what one's doing is so poor. You can witness it on MySpace, the incredible amounts of nonsense that's there.

- Rune Kristoffersen, Rune Grammofon

In fact, no informant wholly dismisses the role of record companies in the discernable future – though some stress a necessary transition to becoming *music* companies. There is a case to be

made for the dismantling of industry control over certain processes in music's value chain; an OECD report on the information economy confirms that as early as 2005, processes of disintermediation and new business structures make themselves noticeable in the digital market – while recognizing the “continued strong role of some traditional market participants (especially the record labels)” (2005; 8). Still, Wilfred Dolfsma (2007) notes that “disintermediation is not likely to occur, if not followed by a process of re-intermediation. [...] one may say that existing parties are in a favourable position to take on such an intermediary position,” he goes on, referring to the necessity of ‘filtering’ bodies in consumers’ selection of music (ibid; 74-75). There thus seems to be no need to completely discard the role of record companies in the future, regardless of size. The constituents of such a role may however be changing.

5.2.2.c Media coverage

Several informants share the opinion that media coverage of digital music and file sharing debates has been relatively consumer oriented, or even taken the side of file sharers. Media coverage is single-tracked, populist and irresponsible, conveying a consumer point of view, claims TONO director Irina Tøien. Jonas Bakken of DagensIT and ArtsPages’ Dagfinn Sætra attach a ‘trendiness’ to sporting negative views on record companies. FONO representative Larry Bringsjord says coverage has largely taken the side of file sharers, Rune Grammofon’s Rune Kristoffersen thinks coverage is single-tracked and even encourages file sharing activity. EMI’s Jarle Savio sees a tendency to making a scapegoat of the industry. Both Bringsjord and Savio are however seeing positive trends in media exposure, aiming for a more nuanced picture. Though agreeing that media attention has been relatively one-sided and consumer oriented, IFPI director Marte Thorsby believes it has simultaneously aided in creating public awareness around the legal issues of file sharing. EFN’s Thomas Gramstad

points out that the media helped has shed light on new actors like FriBit and Urosprederer⁴⁴, but goes on to argue that media coverage is influenced by the lobbying efforts of the record industry.

KRIPOS' Eirik Trønnes Hansen observes that much of media coverage, in his perception, is dominated by individual cases and features, rather than address a broader debate on music. Along the same lines, Erik Brataas of Phonofile feels coverage is dominated by a small number of commentators, who favour a consumer oriented approach. Still, differences exist between these actors, he elaborates, presenting financial daily Dagens Næringsliv as an example of more objective journalism, and tabloid Dagbladet as its counterpart. Also ArtsPages representative Sætra makes an example of Dagbladet, specifically mentioning culture journalist Jan Omdahl, reflecting that Omdahl and his peers would probably not rejoice if their publications were to be copied and distributed illegally by another party, using their own advertisements to fund piracy. Kripos attorney Eirik Trønnes Hansen also comments on the paradox that newspapers spread information about available pirated material.

FriBit representative Svenn-Arne Dragly takes Brataas' argument a step further, describing the public debate as reflected by the media as strictly polarized. He worries that such simplification fails to capture a truthful image of the situation, and that it may steer the debate away from central themes – such as how culture is to be produced and consumed. Kristian Kallevik of Tiger Records criticizes a lack of gravity in media coverage, focusing still on brands and physical formats rather than accepting a new reality where bootlegging and illegal file sharing is the norm.

DagensIT representative Jonas Bakken believes the negative attention given record companies in the media is largely their own fault, given the unintelligent measures undertaken

⁴⁴ An interest organization, currently in collaboration with FriBit. See www.urosprederer.no for more information.

against file sharers and their defensive attitudes. He is supported by Nordic Records manager Thomas Müller:

We asked the consumers to buy our music, but *with limitations*. We went about it completely wrong – and then, we’re also suing individual file sharers for distributing the music for free, while we ourselves offer it to the consumer with limitations. And I think that much of the negative attitude towards the business derives from that. But [...] it’s coming together now.

- Thomas Müller, Nordic Records

A clear majority of respondents are in other words of the opinion that media attention benefits consumers – but whether this is a trait worthy of criticism, there is no consensus. Furthermore, specific media actors are emerging as particularly central in the debate surrounding digital music and file sharing.

Fragmented attention

KRIPOS representative Trønnnes Hansen’s observations of a seemingly fragmented coverage and Phonofile’s Erik Brataas’ view of a limited number of commentators in the digital music debate can be connected to findings in the article “Bits and Paper – press coverage of digital music”⁴⁵ (Trollsås 2009). From a selection of news articles from Norway’s largest newspapers (including Dagbladet and Dagens Næringsliv), spanning from the Napster trial to the launch of the Spotify streaming music service, I derive some tendencies towards media coverage of digital music and file sharing debates. It is concluded that:

Attitudes towards file sharing have developed over time. [All of the selected newspapers] have moved from relative neutrality to expressing clear opinions. It may seem that individual editorial attitudes are more governing than a set agenda from the newspapers’ side. (Trollsås 2009; 32)

⁴⁵ Translation. Original Norwegian title: “Bits og Papir – Pressedekning av Digital Musikk”

Dagens Næringsliv and Dagbladet are recognized as particularly active contributors to debate – Dagens Næringsliv handing the music industry much of the responsibility for a conflict surrounding digital music, Dagbladet for its strong defence of consumer rights. Dagbladet attains similar attention from respondents; the newspaper is specifically mentioned as an advocate of file sharing by some. Dagens Næringsliv is however presented by Brataas as more reflected than Dagbladet. Alongside a perceived improvement of the debate, there is little to suggest that media attention has been one-sidedly on the file sharers' side; but Dagbladet stands out as particularly active, and particularly concerned with the rights of music consumers.

New Media rising

Towards the end of his interview, EMI's Jarle Savio quotes a report from the SOON trend analysis project (run by Synovate Norway). Here, blogs are highlighted as the largest on-line community in the category of social media (alongside Facebook, MySpace, etc.) in Norway. The results of the survey are quite astonishing, Savio thinks:

[The SOON survey] says that 50% of the target demographic of 15-29-year-olds read blogs. And that it is the most important source of news updates for 50% of this group. They spend more time reading blogs than they spend on VG, Dagbladet, and NRK.no altogether⁴⁶. And that's 12% of the population writing those blogs. So in other words, 12% of the target demographic 15-29-year-olds are more important than Dagbladet, VG and NRK.no put together.

- Jarle Savio, EMI

⁴⁶ Norway's two largest newspapers, and public broadcaster.

These results are part of a trend where traditional media are losing terrain to new media based on network mechanisms, Savio believes. The concept of bloggers ‘speaking’ to their peers, in a language and on terms they understand, is appealing to many, he ventures.

Despite the impressive position inhabited by blogs in this report, very few informants touch upon the impact of new media, neither while discussing media coverage in general nor significant market actors. Such a lack of attention may well be connected with a missing connection between a traditional conception of the term ‘media’; to mean newspapers, radio and television, and its more recent uses – to cover social media typically connected with the internet – in informants’ minds. While record companies make more frequent use of the opportunities offered by social media (see e.g. Beer 2008), there might still be a gap between the industry and such media, due to the informal nature of its communication, falling outside established structures in the traditional media regime.

5.2.2.d Legislation

A widespread opinion among informants is relative satisfaction with existing legislation concerning music and file sharing. Rather, enforcement of these laws is inadequate, TONO representative Irina Tøien argues. She is joined by several music industry representatives; IFPI’s Marte Thorsby has experienced this lack of investigations first-hand, citing around two hundred reports filed by her organization over a one-year period, of which only one has been investigated. New Media Manager at EMI Jarle Savio moves along the same lines: stricter enforcement may help statute an example for file sharers, he feels. While stressing the importance of separating legal and illegal forms of sharing music, Savio also wishes for a tighter regulation of Internet access for file sharers; the Internet is not a human right, he argues.

Many blame the gap between legislation and enforcement on political passiveness; it has nourished the music and film industries' habit for private litigation of file sharers, Platekompaniet's Espen Lauritzen believes. Dagfinn Sætra of Artspages shares this opinion, citing IFPI as a central actor in a process where insufficient enforcement creates a desire among the industry for de-criminalization of file sharing, in order to open for civilian lawsuits. Politicians obviously fail to understand their own laws, FONO representative Larry Bringsjord says:

[Politicians] are afraid of the youth. They're afraid of a generation where 90% gets everything for free, and some parties, SV and Venstre in Norway, are in the process of adjusting to the use – the use of one generation – and in part forgetting property and intellectual property rights.

- Larry Bringsjord, FONO

General Manager of IFPI Marte Thorsby believes it vital to invoke initiatives from the Justice and Culture departments of government in order to improve enforcement; the Department of Culture has been hesitant to voice its support, she specifies. Still, Thorsby notes, the general development in Europe gives incentives to hope for easier times ahead. She is joined by Rune Grammofon owner Rune Kristoffersen in looking brightly at the future – though seeing many grey areas in Intellectual Property Rights (IPR) law, he believes the political attention the file sharing debate has drawn will contribute to closing legislative gaps.

Phonofile representative Erik Brataas agrees that enforcement, not legislation, is the trouble. Still, he is weary of the effects of litigation on public opinion. A major issue, he reflects, is the trade-off between technological and legal tools available to creators in order to secure their rights, and consumers' rights for privacy.

These [technological solutions] shouldn't discriminate users based on their equipment and preconditions and so on. And we must manage to avoid this becoming a sort of surveillance system which creeps too far into personal affairs [...] Had we only had universal DRM that would work with people, it would be possible to make many more services, that could contribute to pressing prices for experiencing music downwards.

- Erik Brataas, Phonofile

His view is shared by DagensIT's Jonas Bakken, who recognizes a dilemma in the nexus between surveillance of file sharers and the individual's right to privacy. Surveillance being a relatively extreme measure in the individual case, he notes, the number of IPR violations is so massive that it in sum may call for strict measures. The question, adds Bakken, is whether such measures has any significant effect on the masses of file sharers.

Phonofile's Brataas also asks whether a lack of awareness among the population surrounding legislation may be a source to the current unsatisfactory situation. He is joined by TONO representative Irina Tøien, who notes the necessity of better communicating the contents of the law to the public.

Despite widespread contentment with the legislation itself, not all informants are at peace. Tiger manager Kristian Kallevik blames outdated laws and (along the lines of Tøien's argument above) absence of a proper public debate over legal issues for what he describes as a fundamental failure of current legislation. The law is too unclear, says FriBit's Sverre-Arne Dragly, like many others handing elected officials the blame; they have not delved into a debate on legal issues, nor taking responsibility to solve legislative problems, he claims. Thomas Gramstad of EFN feels legislation on intellectual property has been skewed by the lobbying efforts of the record and film industries. The law must be revised, to weaken the protection of DRM and to allow for non-commercial file sharing between individuals, he states.

A revision of intellectual property law is in fact on the steps, says KRIPOS' Eirik Trønnes Hansen; the question is how long such a revision will take. It is also a political issue, he notes, as to what changes may eventually be implemented – whose voice will be heard? Rights owners on one side, wishing for stricter protection, or some politicians and participants in the public debate who call for further liberalization on the other? An issue to complicate the picture, Hansen comments, there are no specified rules for music in terms of intellectual property law. Nor is it a given that there should be one:

Should one create special provisions in legislation, connected to every different type of technology? That's the kind of legislation we had in Norway a thousand years ago – it was illegal to hit; kick; stab; chop – but now, following centuries of tradition, one makes more general regulations. And so one cannot make a pick-and-choose list, which is completely specific, to say “this is in, this is out”. If we tried that, it would become more confusing than anything else.

- Eirik Trønnes Hansen, KRIPOS

The police is concerned with the uses and practicality of the law, not with having an opinion on its principles, he specifies, adding that there are problems connected both with a more specific and a more generic legislation.

In summary, a multiplicity of problems are connected with current legislation: while most prominently, issues are with the enforcement of IPR law rather than its design, informants also bring up concerns with government passiveness, privacy matters, insufficient public awareness, and archaism, all related to legislation. A central theme is the call for heightened political interference in and priority to resolving legal matters, which is discussed in the following section.

Their law

The wishes for a revised text or changes in political signals towards IPR law regulating music and file sharing reflect ongoing tumults in European policymaking. Court cases are being held throughout the continent testing the boundaries of current legislation – and results are varying. While file sharing services and software providers have suffered defeats in countries like Sweden and France⁴⁷, elsewhere the law is interpreted differently. In Norway, the sitting government has issued statements that current Intellectual Property law is to be revised⁴⁸, with the aim to make it more accessible. Already though, a court ruling has deemed that Internet service providers are not responsible for regulating the file sharing activity of their customers⁴⁹ - an issue which has been central (and verdicts opposing to this been passed) in the abovementioned cases. While industry actors often call for stronger government involvement to settle legislative controversies, and favour a stricter enforcement of the law, the interest organizations think the legislation is outdated and must be changed. Regardless of the outcome of this process, there is a massive pressure to reassess the contents and language of current legislation; but actors' opposing views of what should be done mean a revision is not likely to satisfy all parties, and it is difficult to imagine that any new legislation will do so.

5.2.3 Summary: The group group song

A closer assessment of our pre-defined social groups has wielded some new insights. There are clear differences in the general attitudes towards these groups: while consumers and even file sharers are largely exempt from the distribution of blame for current problems in the music market, the music industry and legislative bodies attain a large share of negative

⁴⁷ Se e.g. http://www.domstol.se/templates/DV_Press____10382.aspx and <http://www.dagbladet.no/2009/05/13/kultur/tekno/fildeling/frankrike/6201381/> for examples.

⁴⁸ St.prp nr.1 (2008-2009) – National Budget 2009

⁴⁹ See <http://www.dagbladet.no/download/09-96202TVI.pdf> for the full verdict

attention. Media is perceived to often take the side of consumers in their coverage in digital music and file sharing debates, but whether this is a negative trait is an unsettled question.

These attitudes are however not shared by all actors. A variety of opinions and focal points litters informants' descriptions of each of these groups, often regardless of actors' position in the market – or their place in pre-defined groups. Although broad tendencies suggest a pattern of attitudes mirroring those social groups discerned in existing research, it would therefore be wrong to assume that these attitudes apply to all members of said groups.

One observation also breaks with the traditional segmentation of social groups. Firstly, record companies are divided by respondents into large, multinational corporations, and smaller 'independent' enterprises. This view holds some validity; while smaller record market actors are not particularly coherent in their takes on various social groups, but rather span from very liberal to rather conservative, umbrella organizations representing the music industry often share analogous perceptions of the market, and leading in the opposition of file sharing. This tendency should be seen in context with the previously identified inclination of existing research to refer mainly to multinational corporations when speaking of a 'record industry', and strengthens the contention that more emphasis need be put on a segmentation of record (or music) companies in research efforts.

5.3 Closure – a stable technology

The final phase of the analysis focuses on the future: what developments relevant actors desire, and how they seek to make these developments become reality. The stabilization of recorded music technology, its *closure*, after which an actor or social group no longer relates any problems to the technological artefact, is central, as it provides pointers towards how actors want to affect further developments in technology. To this end, interviewees were asked: What needs to happen in order to create a better situation in the music market? Who

needs to be involved? The answers given provide a foundation to assess the ways in which various parties wish to affect music technology.

All informants seem to be at peace with a situation in which digital music is a central format, or even dominant. In the same way as they define music's largest challenges to exist within the digital market, so are digital music features emphasized by the interviewees when discussing their desires for the future. The interviewees also recognize a need to change the technology in some way in order to stabilize it – but views on the ways in which it should be changed, into what, and who should be involved in this process, vary. Two broad themes stand particularly strong among respondents: the improvement of legal digital music products and services, and changing current legislation.

Improving

Addressing the former theme first, there are powerful signals to change and improve the governing fauna of technological solutions available for digital music consumption. Some, like Rune Kristoffersen of Rune Grammofon, are no more specific than commenting upon a requirement to implement simple and user friendly solutions. New business models must be adopted, which are adept to the digital market, elaborates FriBit's Sverre-Arne Dragly. Others go into specifics: Platekompaniet's Espen Lauritzen pinpoints the abandoning of DRM protected content as a critical factor for improvement. Phonofile representative Erik Brataas illustrates that there is a need for digital services directed towards Norwegian buyers, using iTunes as an example of 'faceless' global services that have little expertise in domestic and local markets. ArtsPages' Sætra is equally concerned with a lack of proficiency among current digital music vendors. Brataas also voices concerns about the lacking breadth of digital music dealerships.

Lauritzen also argues that payment solutions for small transactions, such as for solitary songs, require modification in order to be effective. Current legislation forbids the storing of customers' credit card numbers by Norwegian on-line businesses – a circumstance which greatly hampers their competitiveness versus foreign actors, he believes. Distributors, record companies and government must come together to solve these problems, says Lauritzen.

Tiger representative Kristian Kallevik sees technological solutions currently in the making with dismay. They are not likely to please their audience, he believes, with a pop-culture focus like that of many radio stations. He wishes for a digital library without a commercial agenda, which will incorporate all forms of musical expression. He does not want a situation in which music becomes a by-product designed to sell other goods.

Music becomes something you just add in; "If you buy this headset in addition to your mobile, you'll get 500 gigabytes of Motown hits for free". [...] And everyone who's bought box sets of '1,000 greatest hits of the Eighties', knows it's just crap.

- Kristian Kallevik, Tiger Records

Jonas Bakken of DagensIT is critical of the subscription model for digital music, arguing it may lack a sensation of ownership for the customer. Also, he contemplates, subscription models do not separate between consumer segments; services are equally priced for highly active users and for those who have a moderate or low music consumption. Pricing policy may therefore be discriminatory to low-level users (or extremely beneficial for active users). TONO's Irina Tøien is also critical to all-access models, where consumers are provided with limitless music regardless of their interest in it. Still, she is positive to on-line subscription models, and streaming services in particular.

This multiplicity of problems connected with current digital music technology provides strong incentives for technological development; but corresponding with the views

expressed elsewhere in their interviews, actors have differing opinions on which direction in which it should evolve.

Lawmaking

Some actors focus on affecting digital music's environment and structural framework, rather than (or in addition to) willing to interfere with the technology directly: as a second central theme, several informants call for government interference in form of revised legislation on intellectual property protection and ownership issues, or to more strictly enforce current legislation. Adapting laws to the realities of the digital age is emphasized as critical to improving a better situation in the music market, by amongst others FONO's Larry Bringsjord. IFPI director Marte Thorsby sees the need to offer products that are in demand, but does not believe such action alone is enough to combat illegal file sharing: for this to happen, laws must be changed, litigation prioritized, and ISPs must participate in some arrangement to block access to file sharing sites, she says. EMI's Jarle Savio emphasizes the need to reduce value added tax in order to enable internationally competitive prices for Norwegian music providers. Internet service providers must be forced to act as 'gatekeepers', regulating the data traffic of their customers, in order to secure financial compensation for on-line music consumption, argues TONO's Irina Tøien.

Elektronisk Forpost Norge's Thomas Gramstad is the only informant who clearly promotes the view that non-commercial file sharing should be legalized. This requires changes in current legislation, to remove all legal protection of DRM, he specifies, renouncing that such alterations will remove the financial foundation for music production:

Many more (people) work with music today than 10-20 years ago; because very many musicians now work with creating music for e.g. computer games, and videos, movies and such things. [...] You hear a lot of stuff like "EMI has to fire 20 people"; or 40 people – but that's not saying anything about the

hundreds, the thousands of new musicians who've entered (the market) through the computer, DVD and movie businesses. As such, the music business is growing strongly. And it will continue to do so.

- Thomas Gramstad, EFN

KRIPOS' Eirik Trønnes Hansen points out a problem with such ideals in current legislation: that it is concerned with protection of intellectual property *in general*, and not of music or movies or games in specific. The law also covers ownership over e.g. source codes for on-line banking services, or companies' lists of clients and customers, he illustrates – and what would happen to such technologies if sharing intellectual property was legalized?

Educating

As a less prominent, but discernable theme, some informants emphasize the importance of information and educating the public in order to change their use of illegal means to collect music and to encourage the use of legal ones. While the aim of and proposed ways in which to provide such information vary, it suggests a popular opinion that rather than changing the technology itself, users may be swayed to change their music consumption behaviour by affecting their *attitudes* towards technologies.

Believing

Finally, the optimism about the future reflected in other parts of the interviews is also present here: many informants are confident that their hopes for the future will become reality. Many industry representatives believe the worst times are over for the music industry; FONONO representative Larry Bringsjord points out that much has already been done, or is in the making, to improve digital offers. FONONO's digital office Phonofile now sells its music 'everywhere', he says; and to satisfy the file sharing generation, new models are being

launched, like Spotify and Nokia's 'Comes With Music' model. Bringsjord makes clear that money is a central theme: "I don't really care how we get paid, as long as we do get paid. Whether it's a broadband fee [...] that's fine. We're to be paid for the music which we have invested tens, hundreds of millions (of kroner) into," he says.

Phonofile's Erik Brataas believes that for artists like Britney Spears, the 'digital revolution' has a limited effect, as her music is already globally available without digital sales opportunities:

...But when Humcrush from Rune Grammofon sells in Katmandu, that's a sale that would never have taken place in physical formats. So it's an additional sale. From such a simplified description, you can see how the minor record companies have an extreme growth potential – which is also extremely unrealised, so far."

- Erik Brataas, Phonofile

Similar sentiments are widely shared, displaying a hope for better conditions for music production and sales in the future.

Summing up, in their assessment of the future of recorded music, interviewees typically focus on four themes: A call for improving current legal products and services; changes in legislation or its enforcement; educating the public; and a high degree of optimism. When elaborating the former two of these themes, actors show how the main weight of their concerns is directed towards two of the pre-defined groups: the record or music industry, and lawmaking and –enforcing bodies. The subject of educating the public is mainly directed towards policymakers; but its primary objective is swaying music consumers into a higher awareness of the 'hazards' of file sharing. In short, informants lay much of the power to create closure in the hands of these groups, and they tend to believe that the desired changes will be implemented in the foreseeable future.

Combined with responses from other parts of their interviews, respondents also provide an image of a changed market for music in the digital realm – both in its technology, and in its structures of power and influence. The following chapters discuss these subjects in further detail.

5.3.1 Closing time: Actors' quest for technological change

While the emphasis on creating satisfactory business models and solutions for the digital market is strong, there are many different views on how such solutions are to be manifested. This section examines the most prominent business models promoted by informants, and applies some analysis using existing research and data.

Technological solutions

An interesting observation is the apparent surrender of the music industry to create on-line listening services that are free to the user, and thereby to the wishes of some of the actors with the strongest anti-industry sentiments. People like EFN's Thomas Gramstad have argued for models of appropriation; and while such a model has yet to gain popularity, advertisement-sponsored solutions are among the hottest in the music industry as of spring 2009. Streaming music service Spotify, though still in its testing stages, has become very popular in countries where it is available⁵⁰, although any definite statistics of users are not yet available. The service's creators have since its launch in October 2008 been experimenting with various types and frequencies of advertising features. So far, however, both Spotify and similar streaming services have found it difficult to produce sustainable income⁵¹. Despite

⁵⁰ Both the free and paid versions of Spotify are available in Sweden, Norway, Finland, the UK, France and Spain as of spring 2009. A version for paying users is available in Austria, Belgium, Estonia, Germany, Italy, The Netherlands, Poland and Portugal.

⁵¹ See e.g. <http://www.guardian.co.uk/technology/2009/oct/09/spotify-ek>

widespread enthusiasm, not all informants in this study are entirely convinced by such solutions, either:

The Spotify service is an example of such a case, where the media have written so much about it that they have participated in shaping the enormous interest in it. For a service which the business, at least we, want a more reflected relationship to.

-Erik Brataas, Phonofile

Some informants draw parallels between digital services and radio broadcasting in terms of artists' revenues and promotion effects. Connolly and Krueger (2006) show that profits from radio play are indeed significant in the U.S. market. The American market is however significantly larger than those in Norway and the Nordic countries. While distribution becomes steadily less problematic spatially due to the digitalization of music, this does not automatically mean the music reaches a much larger audience. The radio did initially function as a promotional tool, more than a source of income for artists (ibid; 697). While this changed with time, the promotional effects of a fully customizable digital music player are far from clear – there is no 'economies of scale' from a single track being played to a large audience, but rather a risk of the digital player substituting the purchase of a physical copy of the music, or even digital files. It may therefore be argued that any royalties agreement designed for streaming services with the aim to maintain artists' and publishers' incomes, such as Spotify, Pandora.com and Last.fm, need to pay more per play (per listener) than similar agreements for radio play. An extenuating circumstance would be if network effects can be observed that are so strong that they match the promotional effects of the radio. Even then, the problem of substitutability between streaming services and sales formats remains; particularly when taking into account the recent surge of initiatives and rising popularity of the former. More research into this eventuality is central for creating optimal solutions for the digital market.

Another argument against artists' losses from file sharing, particularly promoted by EFN representative Thomas Gramstad, is that revenues can be appropriated through frequent live performances in what is seen as a thriving concert market. There are certainly significant revenue opportunities in the concert market; lower expenditures on music purchases and the aforementioned 'sampling effects' from file sharing may even increase demand for live acts. Several complications do however incur when thinking of the relationship between record sales and concert attendance in this manner. Firstly, there is no obvious symbiosis between the file-sharing and the concert-going audience. Whether consumers who have abandoned physical formats have in fact increased their concert attendance is of critical importance to such a claim. Few or no sources support its notion; this may well be related to a lack of empirical studies. Secondly, a shift in demand from records to performances will raise concert ticket prices. Connolly and Krueger illustrate how "bands will keep the price of concerts below the single-market monopoly price if greater attendance raises record royalties, but if this is no longer the case because of file sharing or CD copying, the price of concerts will rise" (2006; 687). A greater pressure will be put on profit margins from concerts in a scenario of diminishing physical sales. Therefore, questions must be raised about the audience's willingness to pay premium prices, as well as their propensity to consume in a fixed time frame if such a scenario shall be seen as viable.

Rocking in the Free World

Interest organization FriBit is actively working to create and promote new solutions to improve the situation; one initiative is the Genero⁵² project, which seeks to make available free cultural content on-line. Although admittedly small, EFN's Thomas Gramstad emphasizes free-to-pay services such as Magnatune.com and Amiestreet.com as alternative

⁵² <http://www.fribit.no/prosjekter/genero/>

solutions in a changed market: business models where paying for music and the amount to pay is voluntary.

Also, in illustrating the intensified competition in today's information society, Gramstad uses the phrasing *information overload*⁵³, and goes on to suggest that this is the situation in the music industry. Furthermore, he believes such a state of near unlimited access makes users disinclined to purchase music. Therefore, the traditional model of unit sales may have to be abandoned to make way for one in which music serves a more complimentary role to selling other products and services, Gramstad argues. This approach sharply contrasts that of music corporations, and would change the artists' motivation to diffuse their music for free; the challenge today, in the shadow of information overload, is making oneself visible, to separate oneself from other information, Gramstad goes on. And the antidote is to diffuse one's work as widely as possible, 'like the seeds of a dandelion', he concludes.

Although models of 'free' music are rarely given credibility by the music industry, many music consumers have to some extent already embraced such ideals by involving in file sharing activity. Frowned upon and often illegal, file sharing is nonetheless currently an established alternative to the channels through which music companies offer their products. Even supporters of non-commercial file sharing like EFN however bring up business models for music consumption that allow some variety of monetary compensation for the artist – if only voluntary. Such mechanisms of compensation are not available in illegal file sharing networks; to the extent that profits are made, they travel no further than the hosts of the file sharing sites.

⁵³ A term first coined by Jacoby, Speller and Berning (1974). The term is commonly used to describe situations where the amount of information available on a given subject is so large that it becomes difficult for a person to make a qualified decision based on it. This may lead to scenarios where decisions become poorer as the amount of information available increases.

From product to service – a rocky road

Tangibility is giving way to portability.⁵⁴ Where, as stated in the introduction, all previous formats of recorded music have had an undisputable physical presence, digitization marginalizes the mass and feel of recorded music. The effects of this change are ambiguous, but it seems inevitably linked with the traditional taxonomy of (physical) products and (intangible) services. Though digital music sales are steadily rising, most actors, regardless of their political stance, emphasize *service* solutions when reflecting over the future of music. This view has several implications. Firstly, there seems to be a gap between the competence of services currently on offer and consumption patterns. McCourt (2005) and Bull (2005) observe how music becomes an increasingly portable element. The use of portable music players accordingly gains similarly increasing relevance in the market. Wired Magazine's Eliot von Buskirk quotes Forrester Research with the phrase:

Increased adoption of mobile data packages and of connected, dedicated portable media players like the iPod Touch are ... giving consumers on-the-go access to previously PC-tethered streaming experiences. In this context, ownership becomes less important if the songs you want are available on demand and on the go.⁵⁵

- Forrester Research, April 2009

While software solutions allow among others the iPhone⁵⁶ and iPod to implement and use the Spotify streaming music service⁵⁷, streaming music services are incompatible with many portable music players; in other words, one of the most significant platforms for experiencing music in the digital age, streaming, is largely mismatched with the leading technological solutions proposed. File sharing services offer a way in which to fill up these players with

⁵⁴ Also Bull (2005; 343-344) and McCourt (2005; 250) support such a claim.

⁵⁵ <http://blog.wired.com/business/2009/04/social-networks.html>; source at <http://www.forrester.com/Research/Document/Excerpt/0,7211,53740,00.html>

⁵⁶ <http://www.apple.com/iphone/specs.html>

⁵⁷ <http://www.spotify.com/en/mobile/overview/>

music, and streaming services will lack this ability until both wireless receptors and mobile Internet subscriptions become widely disseminated in digital music players and among their users, respectively. In its current state of being mainly consumed with laptops as the medium, streaming music therefore holds a major disadvantage in the struggle for music consumers.

Several interviewees touch upon the lack of ‘sufficient’ legal digital services for music when asked for their opinion. Even the strictest advocates of industry interests tend to agree with the argument that the market has failed to offer digital solutions to match illegal file sharing’s interface and perceived value to consumers. It is worth noting that a numbers from pollster Norstat⁵⁸ in March and April 2009 conclude that as little as 4% of the population believe inferior services in the legal market to be a central reason for people’s file sharing behaviour. There may thus be discrepancies between the nature of problems users connect with current technology, and many industry actors’ analysis of such problems.

In short, recorded music technology is still far away from arriving at a materialization which attains closure for relevant parties. In fact, neither industry nor users, nor government⁵⁹, seem to find current technologies in the music market satisfactory.

DRM wasn’t dead

The criticism towards Digital Rights Management (DRM) – the implementation of technological barriers to certain uses of music, typically on CDs and data files – has been massive. Both in recent literature and respondent’s answers, DRM has been named a scapegoat for the falling popularity of music producers. Especially, copy blocking technology in CDs has received negative attention. While the compact disc is now largely free of such restraints, DRM as a concept has not been abandoned. It is central to many of the technological solutions offered by the industry:

⁵⁸ The poll was conducted on request from a range of industry actors – FONO, MFO, TONO, Artistforbundet, IFPI and GramArt.

⁵⁹ See e.g. the European Parliament discussion on the need to revise legislation (p. 111-112)

The discussion around DRM is obliged to return if one is to continue running what I think is an exciting part of it – a rent-out market. If you're supposed to pay "4 øre"⁶⁰ per song, there should be a prerequisite that you can't make a copy at home. [...] One is somewhat shooting oneself in the foot as a consumer by opposing DRM on principle, because it will reduce this business' incentives to make alternative solutions.

- Erik Brataas, Phonofile

The industry does not seem likely to abandon DRM technology in proposed solutions for the digital market, especially not when the keyword is 'streaming' or in similar rental-like services. Types of rights management notorious for their unpopularity among consumers, such as copy blocking on purchased music, may however be disappearing. The disagreements on DRM can possibly partly be traced also to varying perceptions of its definition: while some informants apply DRM as a general term to cover all copy-restricting technology, others (typically its most ardent opposition) seem to refer to the specific technology aimed at preventing CD copying.

A dying format?

Among the multiplicity of digital controversies and proposed solutions, what place is left for the CD? The past decade has witnessed a clear deterioration of CD sales, a process which does not display signs of much recovery. The question emerges: are CDs a dying format?

The responses provided do not suggest such a dramatic end. While the CD as a sound carrier is under heavy fire, not everyone believes it will completely lose relevance in the years to come. Rune Grammofon proprietor Rune Kristoffersen is prepared to continue investing in

⁶⁰ An illustrious exaggeration: less than 1 cent.

CD productions; however, he reflects, the ‘regular CD’, with “bad plastic covers, and not much information”, may be headed for the scrapyard.

I’m mainly concerned with selling physical products, but I do realize that both technology and the wishes of many consumers and music users are headed for a necessity of offering digital music – because there are so many who want it, and do not necessarily see a need for the physical part.

- Rune Kristoffersen, Rune Grammofon

There are clear differences in respondents’ views of outlooks for the CD: some believe it will all but disappear within a few years, others that it has a place yet in the physical market. Sales statistics of recent years show that although CD sales are declining, it is still by far the most popular physical sound carrier⁶¹ – and no other formats are contending for a similarly dominant position in this market. Pollster The Leading Questions find that a majority of UK consumers still holds the CD as their preferred recorded music format (July 2009)⁶². Although digital sales continue to rise, and physical format sales to fall, there is in other words premature to write off the CD as a central sound carrier.

The politics of digital music technology

In addition the political struggle for enforcing copyright legislation, the various solutions offered by relevant parties to improve the situation in the music market embody politics of their own. While there is great willingness among actors with economic interests in music to produce and sell digital products, the proposed solutions typically involve some degree of copyright control. Indeed, protecting copyright owners’ financial interests is a primary concern for most all industry actors (albeit with some exceptions): and this is to be achieved by some regulation of the sharing of their products, or by directly implementing technology to

⁶¹ <http://www.ifpi.no/statistikk/images/lydbae4.gif>

⁶² <http://www.musically.com/theleadingquestion/downloads/090716-cds.pdf>

restrict sharing into the products themselves. As an opposite to such solutions, file sharing software and web sites are ardently allowing uninhibited data traffic (as long as the nature of the data does not directly violate international stature). What is more, file sharing communities are in many cases actively seeking increased anonymity, in order to circumvent stricter international policies and avoid identification and litigation⁶³.

I think the worst nightmare for the record business today is encrypted bittorrent – ‘cause then we’re talking about downloading a tiny bit here and a tiny bit there, and then it is definitely impossible to tell what [the file] is, because it gets encrypted and then decrypted on your PC.

- Sverre-Arne Dragly, FriBit

As long as these factions stand as polar opposites in their assessment of how digital music technology is to function, it seems unlikely that any solution will emerge as a compromise which will satisfy all parties involved.

5.3.2 The times they are a-changing – new constellations of power

There are distinct signals that new actors are emerging, and the balance of power shifting within an increasingly digital market for music. The move into an on-line reality has not only provided the music industry with new opportunities for sales and promotion – it has also opened the door for new challenges, and given new parties reason to be involved in its development. The following paragraphs analyse the real and possible implications of the digitization of music, on the segments of new actors, existing actors, and some that may fall outside this taxonomy.

⁶³ See e.g. <http://www.v3.co.uk/vnunet/news/2118636/file-sharing-pirates-underground>

The new

The growing attention given certain actors traditionally not related to music mirrors the changing scene for recorded music as it becomes increasingly enmeshed in the digital market.

In many informants' minds, actors who provide or regulate Internet access are currently key players in the struggle to affect the development of recorded music technology. Internet Service Providers (ISPs), and to a lesser extent a broadly defined IT industry⁶⁴, distributors of digital content, and the Nordic Copyright Bureau, are brought up as such parties.

The role given ISPs produces some implications. Firstly, it is intimately linked with the call for revised legislation and the enforcement of such. Although several music industry representatives bring up ISPs' option to monitor and control the internet access of their customers in order to restrict file sharing, there seems to be meagre belief in reaching any arrangement of Internet traffic control between rights holders and ISPs through negotiation; instead, the call is made for judicial measures to compel the latter into exercising such control. Recent court rulings have however established that there is currently no room for lawfully forcing ISPs to take measures that regulate file sharing of non-criminal content⁶⁵. To make things worse, ISPs are not particularly willing to adhere to the wishes of the industry.

Norway's largest provider of Internet bandwidth, Telenor, has consistently opposed demands to impose restrictions on its users' internet access with regards to file sharing of music and other cultural goods (see previous footnote). As the principles governing such restrictions on Internet use remain unresolved in the Norwegian legal system, it is likely that this process will eventually be settled in the Supreme Court – but this will take time. Governing bodies internationally, among them the European Parliament, have also stressed the importance of an open and publicly available Internet⁶⁶, though not condemning ISP intervention against file

⁶⁴ Represented in particular by interest organization for the Norwegian information and communications technology industry, IKT-Norge

⁶⁵ See <http://www.dagbladet.no/download/09-96202TVI.pdf>

⁶⁶ <http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=P-2009-4844&language=EN#ref1>

sharing by principle⁶⁷. Also here, processes towards an established framework balancing user rights and intellectual property rights enforcement are ongoing. The wish for tighter regulation of Internet traffic is thus more or less synonymous with a desire for changes in legislation.

By extension, Internet Service Providers, at least when represented by Telenor (being the only ISP involved in legal proceedings about file sharing in Norway) should for now be perceived to oppose solutions in which they play the role of ‘gatekeepers’, controlling the file sharing of music. Also, until legal controversy surrounding ISPs’ responsibilities have been settled, there seems to be little chance of ISP co-operation in matters of file sharing surveillance and persecution. Newspaper Dagens Næringsliv quotes:

We abide by current laws and regulations, and cannot see that there is a judicial foundation that an Internet provider should maintain digital rights owners’ interests, and block individual Internet sites. [...] In our experience, people prefer paying for legal goods also on-line, if price and availability is good, and quality and user experience are sufficient.

- Ragnar Kårhus, administrative director, Telenor, March 2009⁶⁸

Secondly, respondents signal that ISPs are an increasingly empowered party in the digital music market with respect to affecting its technology – even if only indirectly, through denying incorporation of the abovementioned restrictions. Similarly, groups and organizations that are innate to the on-line community are becoming more involved in the development of recorded music technology, as it is increasingly anchored in the digital realm. The dispute over file sharing is essentially an ideological one, centred on the dissemination of and access to information – and not limited exclusively to music. As recorded music has become

⁶⁷ <http://www.europarl.europa.eu/sides/getAllAnswers.do?reference=P-2008-3987&language=EN#def5>;
[#22 a, b](http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+TA+P6-TA-2009-0360+0+DOC+XML+V0//EN&language=EN#BKMD-14)

⁶⁸ <http://www.dagensit.no/trender/article1622541.ece>

available on computer networks, it has also become part of a broader file sharing dispute, and parties involved in the issue file sharing become relevant to the evolution of recorded music technology.

In addition to being the market leader among Norwegian Internet service providers, and being a central party in ongoing legal disputes over file sharing, Telenor plays a double part in the music market: the organization is also Norway's top seller of music for playback on mobile phones (without copy blocking technology, it can be noted). It therefore holds double relevance, with a foot both in the Internet and music supply markets, and should be seen as a particularly relevant new actor with respect to affecting recorded music technology.

The old

That the economic arrangements of music production and consumption have not yet changed, despite their increasing lack of fit with the actual production and consumption process, reflects the continuing power of nineteenth-century ideas of creativity and truth. (Frith 1986; 278)

Simon Frith's judgement over the mid-eighties music culture illustrates that keeping up with the economic realities of music is not a new challenge for the music industry. While, like Frith in his day, respondents in this study widely agree that the music industry has been too slow in responding to the emerging opportunities (and threats) of the music market, conditions in the music market have been severely altered in the quarter century that has passed since the mid-eighties. Estimating the current conditions of pre-defined groups, as assessed by respondents, shows how the proliferation of digital music has had a profound effect on their positions in the market.

There are strong indications that the established recorded music industry, in particular large music corporations, may be losing power. While few believe that a strong market

position will be lost to such actors in the foreseeable future, a weakening of their ability to control the economic and technological developments of music is frequently mentioned as a trait of the digital marketplace. Where power ascribed to industry actors, it is strongly concentrated around representative umbrella organizations. These inhabit a strong position within the minds of market actors.

Media coverage is by some actors considered a strongly influential factor in the shaping of values and opinions surrounding digital music and file sharing. This process is specifically perceived to influence users' view on file sharing, and there is seemingly a correlation between the size of music companies or their representative organizations and a negative view of the national media's approach to the file sharing debate.

As legislative and law enforcing bodies are central to resolving the legitimacy of positions taken by e.g. Telenor, they undeniably have a part to play in the digital music market. Indeed, many interviewees bring up changes in legislation and its enforcement as central to attaining stability in the market. Simultaneously, there is little to suggest that informants see such bodies as an empowered party; they are but completely omitted in the discussion over significant market groups and actors. It may seem that passiveness is a trait ascribed to legislative government and, to some extent, police, by many interviewees: so far, very few clear political signals have been issues on the subject of intellectual property law in general or file sharing in specific. Therefore, while their potential for influence is great, these actors are by their current course of action (or inaction) perhaps deemed less significant by others, and are only considered empowered when and if they take action. As described above, the desire to involve ISPs in measures to restrain file sharing traffic is largely hinged upon the reigning legal framework.

Backtracking for a moment, a similar dynamic applies to the role of Internet service providers (ISPs). These also receive noticeably more attention in the discussion over closure

than do they in the discussion over empowered market actors, and are given particular emphasis by industry representatives in the latter instance. Again, the issue of inaction seems relevant: informants may ascribe Internet Service Providers much *potential* power, e.g. in a scenario where court rulings do not force them to accommodate the wishes of the industry. Developments like the recent court ruling in favour of Telenor (described above) may therefore increase the perceived power of ISPs.

The rest

The notion of significant market actors outside the typical market structure, such as idealistic organizations and other interest groups, is only partly valid. While more recently established initiatives – such as Urospredere and FriBit – gather little to no attention from other respondents, the exception is the more travelled Elektronisk Forpost Norge. This organization is, to the extent that it is recognized, portrayed as the polar opposite of the established music industry in its views and agendas towards file sharing, with an outspoken wish to legalize non-commercial file sharing. (An agenda which, indeed, EFN has).

Suppliers of hardware are noticeably absent in the debate, both among actors and in the literature. Producers and vendors of compact discs, playback equipment and other listening gear are rarely mentioned as significantly influential in the market. The major exception is Apple, market leader in both digital music sales (through digital music store iTunes) and mp3 playback equipment (through their popular iPod mp3 player series). Despite the company's dominant position in the mp3 player market, even here focus among respondents lay majorly on Apple's digital music outlet iTunes rather than its role as a hardware/ mp3 player supplier when explaining the company's influence.

Adding to these observations the consensus among informants that consumers are greatly *gaining* power over music in the same realm, there seems to be a shift in the power

distribution of the social map of music – away from those who actively oppose file sharing, and towards groups that support, participate in, or (like ISPs) remain unwilling to take action against it.

6. Conclusion

This study has sought to investigate the relations between digital music and established actors in the Norwegian market for recorded music. To this end, a number of qualitative interviews have been conducted with representatives of organizations deemed central to power structures in the Norwegian music market. Assessing existing literature on the subjects of music technology in general and digital music in specific, central actors and social groups of actors have been located.

The methodology has followed the outlines of a SCOT analysis, as provided by Bijker (1987, 1995). Informants have personally aided in expanding the selection of interviewees by naming other actors and social groups whom they perceive as empowered in the market, in accordance with Star's (2001) definition of power as a question of 'who is heard' in a debate. The result is a rough draft of the socially constructed market for digital music, providing a peek into the social and relational structures and processes governing the development of music. In addition, interviewees' responses on questions regarding music's social and technological features have provided insight into the ways and directions in which relevant actors wish to influence recorded music technology in the music market. This process of analysing the social construction of music technology is in tune with Bijker's (1987, 1995) SCOT theorem, which explains the development of technologies as a result of social processes between relevant actors; specifically, in terms of actors' wish to stabilize the technology in an ideal incarnation, so-called 'closure'.

The interviews have been analysed using existing academic literature and other empirical data as a backdrop. From this comparison, informants' positions in the music market have been linked to social groups defined by the literature, enabling an assessment of the validity of such a segmentation of actors. An evaluation of the literature's pre-defined

social groups is a third objective in the paper; a critical scrutiny of the popular taxonomy of consumers and producers of music has been given particular attention.

6.1 Completeness and reliability of the study

The selection of informants presented in this thesis does not meet the extensive demands for a complete mapping of recorded music's social surroundings in Wiebe Bijker's spirit. An exhaustive model, exploring the social scene until no new actors emerge, SCOT takes a resource demanding approach, particularly in markets with many players and opinions. Adding this to the vast flora of literature to be covered on the field of file sharing, the limitations of a master's thesis have proven somewhat insufficient for creating a complete picture of the Norwegian market – even when limiting it to the surroundings of recorded music. Particularly, a problem of representation has arisen within relevant social groups: the music industry is, even within Norwegian borders, large, and providing a selection of qualitatively interviewed representatives large enough to deem it representative of the Norwegian music industry would seem almost impossible. Although the umbrella organizations most commonly quoted among industry actors in existing literature are well-represented, they should not be seen as fully representative of the even more oft-quoted 'music industry' as a whole.

Also, a number of relevant actors have proven unavailable for interviews. Some of these would be central to completing the social map which has been the goal of this thesis to produce: in particular, representation of Internet service provider and telecom company Telenor, the legislative bodies of the sitting government, newspaper Dagbladet, Apple, and major record companies Warner Music, Sony Music and Universal Music were sorely missed, having surfaced as highly relevant parties in existing research and in interviews.

These methodological shortcomings prevent the findings presented here from being fully representative of the domestic music market. Its results are nonetheless of interest and relevance, summarizing the attitudes of many organizations representing (within certain limits) many of the market's most significant actors, alongside a selection of individual actors. The conclusions may therefore be perceived as a rough outline of the music market, and a platform on which to build further empirical studies.

Though all actors in the Norwegian music market can claim a large degree of independence from foreign offices⁶⁹, there is little doubt that the struggle over digital music is an international one, and that forces working at a global level affect the Norwegian market. This notion is strengthened through the interviews, both in terms of the opinions expressed, numbers and sources cited, and the often non-spatial character of the debate. The applicability of this study's results in an international setting is limited⁷⁰. The Norwegian music market certainly has its unique characteristics and actors, even though international corporations and organizations are well-represented, and is not synonymous with those of other countries or the global music market. An internationally directed study, seeking to explore the opinions and agendas governing said multi-national actors, would greatly benefit the insights into the social construction of recorded music technology available in the domestic market, as indeed, much of the technology available in Norway develops without heed to national boundaries.

6.2 Before and after: Social maps of the music market

The process of identifying and comparing relevant social groups, as defined firstly by existing literature, and secondly by the relevant parties themselves, has brought to light some differences between the images produced by these two approaches. Research on digital music

⁶⁹ An argument supported by IFPI's Marte Thorsby in her interview.

⁷⁰ Though some results indicate that patterns of music consumption, at least, travel well across borders, even in countries both spatially and culturally separated (Favaro & Frateschi, 2007; 212).

and file sharing has largely disregarded distinctions that may lie behind the generic terminology of ‘the music industry’. Consumers are also subject to generalizations; while insight into the various demographics of music buyers and file sharers (and their interrelatedness) has been gained, the links between their behaviour as consumers and actual opinions on digital music technology have been given little attention. Alongside a third group of relevant actors highlighted in the literature – legislative government – music consumers and music industry are often treated as homogenous and taxonomic factions with respect to such attitudes and opinions. In reality, differences in attitudes towards digital music and file sharing flourish within the music market – also within these pre-determined groups. In Bijker’s (1987) heuristic, social groups are defined by their members’ shared view of the problems related to a technological artefact; but such agreement does not exist within the groupings typical of existing research. Rather, shared opinions towards digital music technology seem to exist across the confines of such segmentation. There is indeed agreement on many issues among several respondents, but such concurrence often occurs relatively at random with respect to pre-defined groups. Particularly, these results aid in discrediting the widespread tendency in existing research to treat users and producers of music as taxonomic entities.

On some matters, all informants are however in accord. There is a unison belief that the largest challenges facing the music market are connected to digital formats. It is also unanimously accepted that the digital market is a central component in the future of recorded music. No interviewee expresses a desire to keep recorded music separated from the digital market, and there is agreement that this market offers great potential for recorded music as a product. A central dispute is concerned with the nature of this potential, and how it is to be effectively harvested while maintaining a ‘fair’ market, in which deserving actors are still able to benefit economically from music production. Who is deserving of such compensation is

however a disputed topic, and many informants welcome lessened dominance from large music corporations.

This diminishing ‘dominance’ relates to a second central theme of the study; the division of power in the domestic music market. Defined as the ability to affect recorded music technology in a desired direction, power is observed to be shifting away from record companies and similar traditional music industry players⁷¹, and towards new actors that are often strongly enmeshed in the digital realm. In particular, Internet Service Providers (ISPs) are perceived to be gaining influence, with market leader Telenor in the lead (partially due to the company’s direct involvement in court proceedings concerning the legitimacy of regulating consumers’ access to file sharing networks). News media, and specifically newspapers, are also found to be an empowered party. Newspapers’ perceived relevance, both as a platform for debate and as an influence on the general opinion on digital music and file sharing, confirms the need for including such parties in future research on the development of recorded music technology. File sharing advocates EFN emerge as one of few interest organizations that receive a noticeable degree of attention.

More than any, however, the group that is found to gain the most power in the digital music market is music consumers. Now strongly participating in the development and dissemination of competing technology which offers virtually costless music, outside the established commercial market, users are in an unprecedented position to affect the development of recorded music technology. Their continued use or abandoning of illegal file sharing services is at the heart of the struggle for control over the digital music market. Users are in many ways a ‘silent majority’, not prone to organizing themselves to front their views on the technological artefact of recorded music; but through their decision to obtain and use file sharing software in place of or alongside established channels of music commerce, they

⁷¹ In the current market, organizations representing the music industry, such as IFPI and FONO, are holding up well in terms of empowerment.

nonetheless make themselves heard more loudly than any other party in the recorded music market.

Although many consumers undoubtedly affect recorded music through their decision to partake in file sharing, the relevance of approaching users as a homogeneous group in this respect must be discussed. The size of and variety among users as a group are certain to embody more or less every facet of attitudes towards recorded music. Still, the number of file sharers seems to have a correlation with the demise in CD sales, and thus many users, but not all, contribute strongly to discrediting the CD as a format. It is likely that many users are conservatives, upholding a habit of purchasing CDs; some more or less exclusively use file sharing services when attaining music; and many are to be found somewhere between such extremes.

As a pre-defined group, thus, the ‘users’ segment has limited applications – while the behaviour of music consumers may successfully be used as a factor in explaining recent years’ developments in recorded music technology, they can hardly be seen as a homogenous group in terms of the problems they relate to this technology. Many users have taken part in file sharing, and therefore promoted the dissemination of file sharing applications; but others have refrained, thereby hampering the diffusion of said applications. (If *all* users were to embrace file sharing and abandon all other forms of music trade and distribution, surely the CD and paid music file industries would be bankrupt). It is vital for a deeper understanding of users’ effect on recorded music technology that further research is made into the variations among them as a social group; file sharing is only a part of the equation. A similar segmentation should be conducted on the recorded music industry; while this study identifies certain tendencies pointing towards a separation of multi-national corporations and SMEs within the music industry, further studies are necessary in order to understand the internal workings of recorded music companies as a social group.

6.3 Closing up – stabilization of digital recorded music

A related objective of the study has been to examine in *which direction* relevant parties seek to influence the development of recorded music technology, in order to attain *closure*; a perceived stabilization of the technology. It is found that, while all actors are eager to see an adaptation of legal alternatives for music trade to better comply with the realities of the digital market, many (but not all) music industry actors desire business models where users pay for recorded music. EFN emerges as a polar opposite to this view, calling for legalization of non-commercial file sharing. The media is often portrayed as taking the file sharers' side in questions of the moral legitimacy of file sharing.

The outcome of this new 'equation of power' and its technological manifestations may not be settled until the final group deemed relevant by actors – government, legislative and law enforcing bodies – arrive at some decision as to how file sharing is to be handled by the letter of the law. If at some point any decree is passed which eases the difficulties of file sharer litigation, the industry will surely regain at least some of its former influence; if not, there may be a change in the constellation of power over music that we have been accustomed with.

In summary, though failing to emerge as coherent in terms of the problems they relate to recorded music technology, the pre-defined groups that were identified in existing literature hold up well in terms of their perceived *empowerment* in the market. Users, record industry, and legislative bodies are all emphasized by several informants as relevant parties in the control over the music market. While there is no evidence to support neither the proposition of a strict segmentation of social groups, nor a clean taxonomy between the recorded music industry's attitudes towards music and those of their customers, there is a case to be made for these actors' tendency to define each other in social groups. Their influence on the market is

thus strengthened in instances where members of said groups' efforts are synchronized; after all, power is about being heard.

6.4 The way forward – a personal note

As the music market has become accustomed to its new, digital surroundings, so have digital business models become an intrinsic part of its economy. The Internet's capacity to diminish spatial boundaries in the trade and experience of music has opened a global market for even the smallest artist. Sound sources report that music consumption has never been higher; the availability and portability of music in the digital age is sure to be contributing factors to this development. On-line sales are rapidly increasing, and hopes are high within the industry that a sustainable market is close at hand. Yet, alongside the personal freedom, the optimism, the outlook for closure in digital music technology, new challenges will inevitably arise as it evolves. New actors emerge, with new agendas, and exercise their power, relating new problems to existing technology.

Some such actors have been identified in this paper; particularly, there is much to suggest that debates over the role of Internet service providers and legislative restrictions on sharing culture will be central themes in the years to come. The platforms on which music should be offered to consumers will be a topic of discussion, and the 'winning' technology will solidify music's trajectory towards being either a product or a service – or perhaps something in between.

Another predicament, unacknowledged and possibly vast, looms in the shadows of the digital music realm: *How may the pressure for standards be combined with a fairly balanced power structure?* As has been argued, the social nature of music produces a pressure towards standardization of, or co-compatibility between, formats. This force seems no less vital in a digital setting; in fact, many informants bring up the pressure to provide 'all-in-one' services,

in which all published music is accessible through one portal. In this study, for example, the Spotify streaming service is repeatedly emphasized as one of the most promising tools for revitalizing the music business. In April 2010, the service launched a feature in which Spotify can be synchronized with a laptop's iTunes music library. Competing services are however barely given any attention by the study's informants.

A scenario of one dominating technological solution will entail two dramatic consequences: An extreme empowerment of one or a few actors in the market, and the inevitable disempowerment of others.

Whether this is a desirable constellation in the digital music market will be for its participants to decide. It is however worth noticing that much of previous criticism towards the music industry has been directed at its oligopolistic structure. It is important to assess not only what kinds of technology we want, but also what constellations of actors we wish for to be involved in it, in the continuing debate over the evolution of music.

What specifically needs to be done, is to comprehend what consumers want, and begin to really emphasize that; to comprehend what artists want, and really emphasize *that*; to comprehend what roles various actors play in the market: what roles we need; how we need them to work; and start looking at new business models adapted to a digital market, rather than using old ones.

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Special thanks to:

Atle Hauge, for unwavering support, unparalleled tutoring, and unbridled enthusiasm;

Imran Akthar, for constant nocturnal vigilance in the search for grammatical errors, and
priceless computer know-how;

Markus Bugge, for taking time off his ph.d. to enlighten me on matters of culture and
marketing myopia;

Daniel Gitlesen and countless others, for innumerable hours spent sharing, loving, loathing
and discussing music.

And heartfelt gratitude for all interviewees and contributors, for granting me such openness
into the workings of the Norwegian music milieu.